Appendix B: Elementary Reading Attitude Survey

Date $\qquad$ Grade $\qquad$ Name $\qquad$

1. How do you feel when you read a book on a rainy Saturday?

2. How do you feel when you read a book in school during free time?

3. How do you feel about reading for fun at home?

4. How do you feel about getting a book for a present?

5. How do you feel about spending free time reading?

6. How do you feel about starting a new book?

7. How do you feel about reading during summer vacation?

8. How do you feel about reading instead of playing?

9. How do you feel about going to a bookstore?

10. How do you feel about reading different kinds of books?

11. How do you feel when the teacher asks you questions about what you read?

12. How do you feel about doing reading workbook pages and worksheets?

13. How do you feel about reading in school?

14. How do you feel about reading your school books?

15. How do you feel about learning from a book?

16. How do you feel when it time for reading class?

17. How do you feel about the stories you read in reading class?

18. How do you feel when you read out loud in class?

19. How do you feel about using a dictionary?

20. How do you feel about taking a reading test?


GARFIELD: © 1978 United Feature Syndicate, Inc.

## Elementary Reading Attitude Survey Scoring Sheet

Student Name $\qquad$
Teacher $\qquad$
Grade $\qquad$ Administration Date $\qquad$

## Scoring Guide

4 points Happiest Garfield
3 points Slightly smiling Garfield
2 points Mildly upset Garfield
1 point Very upset Garfield
Recreational reading Academic reading

1. $\qquad$ 1.
$\qquad$
2. $\qquad$ 2. $\qquad$
3. $\qquad$ 3. $\qquad$
4. $\qquad$ 4. $\qquad$
5. $\qquad$ 5. $\qquad$
6. $\qquad$ 6. $\qquad$
7. $\qquad$
8. $\qquad$
9. $\qquad$
10. $\qquad$
11. $\qquad$ 9. $\qquad$
12. $\qquad$ 10. $\qquad$
Raw Score: $\qquad$ Raw Score: $\qquad$
Full scale raw score $\qquad$ (Recreational + Academic): $\qquad$
Percentile ranks: $\qquad$ Recreational

Academic
. . . . . . . . . . . . . . . . . ..Full scale
© PAWS - www.professorgarfield.orgSurvey designed by Dennis J. Kear, Wichita State University

Name $\qquad$ Date $\qquad$

1. How do you feel about reading? Why? (Motivation)
$\qquad$
$\qquad$
2. What do/ don't like about reading? (Interest)
$\qquad$
$\qquad$
3. When you read at home, do you have a favorite place to read? (Motivation)
$\qquad$
$\qquad$
4. Do you have a favorite series of books or magazines? (Interest)
$\qquad$
$\qquad$
5. How often do you read? How long? (Time invested)
$\qquad$
$\qquad$
$\qquad$
6. What makes you want to keep reading? (Motivation)

Appendix D: HSIRB Proposal

## Part I: RESEARCHER

| Proposer: | 2. Department: <br> M.ED |
| :--- | :--- |
| Mailing address: <br> 409 East Beil Ave. <br> Nazareth, Pa 18064 | 4. Phone: <br> 610-759-8544 |
| $\quad$ E-mail address: |  |
| Ken_thomas845@msn.com |  |

7. Title of Proposal:

The Effects of Multisensory Phonics Instruction when used with Authentic Literature.

## 8. Faculty Advisor: Dr. Charlotte Rappe Zales

## Part II: PROPOSAL TYPE

1. This research involves ONLY the use of educational tests (cognitive, diagnostic, aptitude or achievement).
$\qquad$ Yes
X _No
2. This research collects interviews or surveys ONLY of elected or appointed public officials or candidates for such.
$\qquad$ Yes
x_No
3. This research involves ONLY observations of public behavior.
Yes
$\ldots \_$___ No
4. This research involves ONLY existing data, documents, records or specimens.
$\qquad$
Yes
x__No
5. List the research funding sources, if any.
none
6. The results of this research will be published.
```
    x__Yes
        No
        Uncertain
```

If you marked "yes" or "uncertain", please provide a brief description of the possible forum of publication (for example, peer-reviewed journal, conference presentation, etc.)

Description of publication forum:
Thesis document to be published and placed in Reeves Library at Moravian College

In this next section, you will provide extensive details about the research project. Please make sure that your explanations/descriptions are clearly written and grammatically correct so that the committee can accurately follow and assess your proposal.

## Part III. DETAILS OF THE RESEARCH PROJECT

1. In this section, you have the option of either addressing each of the following subheadings individually or together (since there may be some overlap) in your proposal narrative. If providing a narrative, please make sure that each of the following topics is clearly identified in the narrative.
a. Objectives: My objective is to study what will be the observed and reported experiences when struggling fourth grade readers are explicitly and systematically taught multisensory phonics with authentic literature.
b. Design: The design of this study is action research. The study will involve student observations, surveys, interviews, and artifacts.

## c. Procedures (makes sure you clearly describe what is required of subjects):

d. Outline procedures/steps to reduce risks to subjects:

To reduce risk to subjects I will: use pseudonyms, protect the identity of students, teachers and school, require parent permission to participate, get approval from our building principal, secure all data collected in a locked office, and shred all data at the completion of the study.
2. This research involves the following GROUP(S) vulnerable to risk. Check all that apply.
x___ Subjects under the age of 18
Prisoners
Pregnant women
x
People with mental, cognitive, intellectual, or physical disabilities
Volunteer sample so vulnerable group membership may be unknown


#### Abstract

Research Design Note: If you are asking for volunteer participants, you will not necessarily know whether or not your participants are under 18, pregnant and/or disabled. In fact, your volunteers may themselves not know whether they fall into one of these categories. Therefore, if you are asking for volunteer participants, you need to think carefully about whether or not your research project could adversely affect someone in any of these categories, and if so, how you might try to either screen out these individuals and/or design the project so that the risk to these individuals is minimized.


2a. If you checked any or all of the groups identified above, explain why you need to use the group and the methods you will use to minimize risk. If your research design proposes no special risks to these vulnerable individuals even if they happen to be included in your sample, please state why:

The students who may participate are in my Title I Reading class. Some students have specific learning disabilities, IEP's and 504 plans. Some have been diagnosed with ADD/ADHD.
3. This research might affect people with special vulnerabilities (for example, pregnant women, people with allergies, people taking some medications, people with cognitive impairments such as ADHD, etc.)

[^0]someone with a cognitive impairment? Are people completing your instrument in solitude or in a group setting? Might comparative performance result in excessive stress?
x__ Yes No

If you checked "Yes", explain the methods you will use to minimize risk to these people.
My research study may include students with specific learning disabilities. They may have and IEP, 504 plan or be diagnosed with ADHD. To minimize risk, I will specify all accommodations outlined in the specific learning plans.
4. Describe your subject pool including:
a. the intended number of subjects
b. subject characteristics/demographics

```
a) 1 group of 8 students
b) Fourth grade student ages 9 and 10. There will be approximately 4
boys and 4 girls. Their socioeconomic backgrounds are diverse.
```

5. Describe in detail the methods you will use to recruit your subjects.

These students will be assigned to me as part of the Title I Reading program.
6. This research involves deception of subjects.


If you checked "Yes", describe the nature of the deception and your debriefing procedure. You will need to provide the debriefing statement with the full proposal submission. Even if the debriefing will be done orally, you need to submit the text of the verbal statement that will be read to participants.
7. Explain by whom and how the subjects will be informed of the purposes of this research project. (Remember to provide a copy of the informed consent form with this proposal form.)

As their classroom teacher, I will explain to the participants the purpose of my research. All participants will receive a consent letter outlining the purposes of the research as well as a letter stating the procedures to minimize risk. The consent letter will be reviewed by the participants parents/guardians. My principal will also receive a letter explaining my research and study. He will sign the consent form before I begin.
8. This research collects information, which (check all that apply)

```
deals with sensitive aspects from the participant's point of view. x identifies the subject by name or number codes. might place the subject at risk of liability if made public. might place the subject's financial standing or employability at risk if made public.
```

Research Design Note: Think carefully about whether or not your research deals with topics that may be sensitive from the participant's point of view. Sometimes it is not obvious to the researcher that the subject of their research may be a sensitive topic for others.

If you checked any or all of the categories above, explain the methods you will use to
a. safeguard the data you collect (you need to describe this safeguarding procedure in detail, including but not limited to a description of how the data will be protected (for example, in a locked cabinet), whom will have access to the data, and how and when the data will be destroyed)
b. inform subjects of available support services (If your participants are drawn from the Moravian College community, please provide contact information for the Counseling Center, Campus Safety and the Health Centercontact information available on the HSIRB website. For participants drawn from other communities, please provide the comparable support service information.)
c. minimize the risk of identification of subjects.
> a) My data will be kept in a locked office and I am the only one who will have access to it. Once the research is complete, the data will be destroyed.
> b) Subjects will be informed of support services in the consent letter.
> c) Risks will be reduced by referring to subjects by pseudonyms, locking up data, and destroying all data at the conclusion of the study.
> If support services are needed they will be provided by the school counselor, principal, and Dr. Charlotte Zales.

Dear $\qquad$ ,

August 21, 2013
Presently, I am taking courses toward my Master's Degree in Curriculum and Instruction with a Reading Specialist's Certificate at Moravian College. These courses provide me with the most effective teaching strategies to implement in my classroom in an effort to enrich my students' educational experiences. Over the next year I will be completing my coursework at Moravian, which means that I am currently planning my Master's thesis. From August 26, 2013 to December 20, 2013 I will be carrying out my study.

During the fall 2013 semester, I am required to conduct a systematic study of my teaching practice. My research will examine the use of explicit phonics instruction and how they are applied to authentic literature in a Title I Reading group. The use of authentic literature will engage the students' interests and encourage students to bridge a skill taught in isolation to an authentic reading experience. Primarily, the focus of my research will be the students' ability to transfer their decoding strategies to authentic literature. Secondly, I will be observing students' interest levels when reading authentic literature. In the end, I hope to develop stronger, independent readers who develop a lifelong love for reading.

I will be collecting data to support my study through surveys, student interviews, reader response journals, decoding and fluency assessments, and observation. By carefully analyzing the data, I will be able to reflect on and improve my teaching practices. All students will have the opportunity to provide authentic feedback through these methods; however, I will only use information collected from students who have permission to participate in the study in any written reports of my research. All of the students' names will be kept confidential as well as the names of teachers, other staff, and the school. Pseudonyms will be used in place of names. Only my name, the names of my sponsoring professor, and Moravian College will appear in this study. Pseudonyms will replace names included on work samples and in any reports of my study. Minor details of a students' writing may be altered to ensure anonymity. Finally, all research materials will be kept in a secure location in my office.

All students in my classroom will receive the same instruction and assignments as part of the Title I Reading curriculum. Participation in the study, however, is entirely voluntary and will not affect the student's grade in any way. Any student may withdraw from the study at any time without penalty by writing me a letter, sending me an e-mail, or leaving me a voicemail. The parent or guardian may also withdraw the student at any time. If the student withdraws, I agree that I will not use any data pertaining to him or her in any written reports of my research.

If you have any questions or concerns about my research at any time, please contact me at school by phone or by e-mail at wthomas@nazarethasd.org. The director of the Master of Education Program at Moravian is Dr. Joseph Shosh. Dr. Shosh can be contacted by email at jshosh@moravian.edu or by phone at 610-861-1482.

If you do not have any questions at this time, please sign and return the second page of this letter. Thank you in advance for your support.

## Sincerely,

Wendy E. Thomas

I attest that I am the principal of the teacher conducting this research study, that I have read and understand this consent form, and that I have received a copy. Wendy E. Thomas has my permission to conduct this study.

Principal's Signature: $\qquad$

Date: $\qquad$

Dear $\qquad$ ,

Presently, I am taking courses toward my Master's Degree in Curriculum and Instruction with a Reading Specialist's Certificate at Moravian College. During the fall 2013, I will be completing my coursework at Moravian, which means that I am currently planning my Master's thesis. These courses provide me with the most effective teaching strategies to implement in my classroom in an effort to enrich my students' educational experiences. One of the requirements of the program is that I conduct a systematic study of my own teaching practices. This semester, I am focusing my research on the use of multisensory phonics practices with authentic literature. The title of my research is The Effects of Multisensory Phonics Instruction when used with Authentic Literature. My research will examine the use of explicit multisensory phonics instruction and how it is applied to authentic literature in a Title I Reading group. The use of authentic literature will engage the students' interests and encourage students to bridge a skill taught in isolation to an authentic reading experience. Primarily, the focus of my research will be the students' ability to transfer their decoding strategies to authentic literature. Secondly, I will be observing students' interest levels when reading authentic literature. In the end, I hope to develop stronger, independent readers who develop a lifelong love for reading.

I will be collecting data to support my study through surveys, student interviews, reader response journals, decoding and fluency assessments, and observation. By carefully analyzing the data, I will be able to reflect on and improve my teaching practices. All students will have the opportunity to provide authentic feedback through these methods; however, I will only use information collected from students who have permission to participate in the study in any written reports of my research. All of the students' names will be kept confidential as well as the names of teachers, other staff, and the school. Only my name, the names of my sponsoring professor, and Moravian College will appear in this study. No names will be included on work samples or in any reports of my study. Minor details of a students' writing may be altered to ensure anonymity. Finally, all research materials will be kept in a secure location in my office.

All students in my classroom will receive the same instruction and assignments as part of the Title I Reading curriculum. Participation as a subject in the study, however, is entirely voluntary and will not affect the student's grade in any way. Any student may withdraw from the study at any time without penalty by writing me a letter, sending me an e-mail, or leaving me a voicemail. The parent or guardian may also withdraw the student at any time. If the student withdraws, I agree that I will not use any data pertaining to him or her in any written reports of my research.

If you have any questions or concerns about my research at any time, please contact me at school by phone or by e-mail at wthomas@nazarethasd.org. You may also contact he director of the Master of Education Program at Moravian College, Dr. Joseph Shosh. Dr. Shosh can be contacted by email at jshosh@moravian.edu or by phone at 610-861-1482. Any questions about your
rights as a research participant may be directed to Dr. Virginia O’Connell, Chair HSIRB, Moravian College, Bethlehem, PA 18018, 610625-7756.

If you do not have any questions at this time, please sign and return the second page of this letter. Thank you in advance for your support.

Sincerely,

Wendy E. Thomas

I attest that I am the parent/guardian of the student listed below. I understand that my child has been given the opportunity to participate in this research study under the guidance of Moravian College and it is optional. This study has been approved by the Nazareth Area School District Board of Education and her principal. I have read and understand this consent form. Wendy E. Thomas has my permission to include my child in her study.

Name of Student: $\qquad$ Grade: $\qquad$

Parent/Guardian Signature: $\qquad$ Date: $\qquad$ <br> \title{

## Rewards

} <br> \title{

## Rewards

}

## 5 Stickers............... token

10 Stickers........ pencil set
15 Stickers...............Dinner

20 Stickers.... Reading Rm

25 Stickers..........Treasure

30Stickers...........Hw Pass


Appendix H: Running Record Sample

Appendix J: Fry Sight Word List

Fry Words - The Second Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| over | say | set | try |
| new | great | put | kind |
| sound | where | end | hand |
| take | help | does | picture |
| only | through | another | again |
| little | much | well | change |
| work | before | large | off |
| know | line | must | play |
| place | right | big | spell |
| years | too | even | air |
| live | means | such | away |
| me | old | because | animal |
| back | any | turn | house |
| give | same | here | point |
| most | tell | why | page |
| very | boy | ask | letter |
| after | follow | went | mother |
| things | came | men | answer |
| our | want | read | found |
| just | show | need | study |
| name | also | land | still |
| good | around | different | learn |
| sentence | form | home | should |
| man | three | us | America |
| think | small | move | world |

http-I/www.k12reader.com

Fry Words - The Third Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| high | saw | important | miss |
| every | left | until | idea |
| near | don't | children | enough |
| add | few | side | eat |
| food | while | feet | face |
| between | along | car | watch |
| own | might | mile | far |
| below | close | night | Indian |
| country | something | walk | real |
| plant | seem | white | almost |
| last | next | sea | let |
| school | hard | began | above |
| father | open | grow | girl |
| keep | example | took | sometimes |
| tree | begin | river | mountains |
| never | life | four | cut |
| start | always | carry | young |
| city | those | state | talk |
| earth | both | once | soon |
| eyes | paper | book | list |
| light <br> thought <br> head | together | hear | stop |

http-I/www.k12reader.com

Fry Words - The Fourth Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| body | order | listen | farm |
| music | red | wind | pulled |
| color | door | rock | draw |
| stand | sure | space | voice |
| sun | become | covered | seen |
| questions | top | fast | cold |
| fish | ship | several | cried |
| area | across | hold | plan |
| mark | today | himself | notice |
| dog | during | toward | south |
| horse | short | five | sing |
| birds | better | step | war |
| problem | best | morning | ground |
| complete | however | passed | fall |
| room | low | vowel | king |
| knew | hours | true | town |
| since | black | hundred | I'll |
| ever | products | against | unit |
| piece | happened | pattern | figure |
| told | whole | numeral | certain |
| usually | measure | table | field |
| didn'† | remember | north | travel |
| friends | early | slowly | wood |
| easy | waves | money | fire |
| heard | reached | map | upon |

http://www.k12reader.com

Fry Words - The Fifth Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| done | decided | plane | filled |
| English | contain | system | heat |
| road | course | behind | full |
| half | surface | ran | hot |
| ten | produce | round | check |
| fly | building | boat | object |
| gave | ocean | game | am |
| box | class | force | rule |
| finally | note | brought | among |
| wait | nothing | understand | noun |
| correct | rest | warm | power |
| oh | carefully | common | cannot |
| quickly | scientists | bring | able |
| person | inside | explain | six |
| became | wheels | dry | size |
| shown | stay | though | dark |
| minutes | green | language | ball |
| strong | known | shape | material |
| verb | island | deep | special |
| stars | week | thousands | heavy |
| front | less | yes | fine |
| feel | machine | clear | pair |
| fact | base | equation | circle |
| inches | ago | yet | include |
| street | stood | government | built |

http-I/www.k12reader.com

Fry Words - The Sixth Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| can't | picked | legs | beside |
| matter | simple | sat | gone |
| square | cells | main | sky |
| syllables | paint | winter | grass |
| perhaps | mind | wide | million |
| bill | love | written | west |
| felt | cause | length | lay |
| suddenly | rain | reason | weather |
| test | exercise | kept | root |
| direction | eggs | interest | instruments |
| center | train | arms | meet |
| farmers | blue | brother | third |
| ready | wish | race | months |
| anything | drop | present | paragraph |
| divided | developed | beautiful | raised |
| general | window | store | represent |
| energy | difference | job | soft |
| subject | distance | edge | whether |
| Europe | heart | past | clothes |
| moon | site | sign | flowers |
| region | sum | record | shall |
| return | summer | finished | teacher |
| believe | wall | discovered | held |
| dance | forest | wild | describe |
| members | probably | happy | drive |

http:I/mww.k12reader.com

Fry Words - The Seventh Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| cross | already | hair | rolled |
| speak | instead | age | bear |
| solve | phrase | amount | wonder |
| appear | soil | scale | smiled |
| metal | bed | pounds | angle |
| son | copy | although | fraction |
| either | free | per | Africa |
| ice | hope | broken | killed |
| sleep | spring | moment | melody |
| village | case | tiny | bottom |
| factors | laughed | possible | trip |
| result | nation | gold | hole |
| jumped | quite | milk | poor |
| snow | type | quiet | let's |
| ride | themselves | natural | fight |
| care | temperature | lot | surprise |
| floor | bright | stone | French |
| hill | lead | act | died |
| pushed | everyone | build | beat |
| baby | method | middle | exactly |
| buy | section | speed | remain |
| century | lake | count | dress |
| outside | iron | consonant | cat |
| everything | within | someone | couldn't |
| tall | dictionary | sail | fingers |

http-I/mww.k12reader.com

Fry Words - The Eighth Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| row | president | yourself | caught |
| least | brown | control | fell |
| catch | trouble | practice | team |
| climbed | cool | report | God |
| wrote | cloud | straight | captain |
| shouted | lost | rise | direct |
| continued | sent | statement | ring |
| itself | symbols | stick | serve |
| else | wear | party | child |
| plains | bad | seeds | desert |
| gas | save | suppose | increase |
| England | experiment | woman | history |
| burning | engine | coast | cost |
| design | alone | bank | maybe |
| joined | drawing | period | business |
| foot | east | wire | separate |
| law | choose | pay | break |
| ears | single | clean | uncle |
| glass | touch | visit | hunting |
| you're | information | bit | flow |
| grew | express | whose | lady |
| skin | mouth | received | students |
| valley | yard | garden | human |
| cents | equal | please | art |
| key | decimal | strange | feeling |

Fry Words - The Ninth Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| supply | guess | thick | major |
| corner | silent | blood | observe |
| electric | trade | lie | tube |
| insects | rather | spot | necessary |
| crops | compare | bell | weight |
| tone | crowd | fun | meat |
| hit | poem | loud | lifted |
| sand | enjoy | consider | process |
| doctor | elements | suggested | army |
| provide | indicate | thin | hat |
| thus | except | position | property |
| won't | expect | entered | particular |
| cook | flat | fruit | swim |
| bones | seven | tied | terms |
| mall | interesting | rich | current |
| board | sense | dollars | park |
| modern | string | send | sell |
| compound | blow | sight | shoulder |
| mine | famous | chief | industry |
| wasn't | value | Japanese | wash |
| fit | wings | stream | block |
| addition | movement | planets | spread |
| belong | pole | rhythm | cattle |
| safe | exciting | eight | wife |
| soldiers | branches | science | sharp |

http:I/mww.k12reader.com

Fry Words - The Tenth Hundred

| List 1 | List 2 | List 3 | List 4 |
| :---: | :---: | :---: | :---: |
| company | sister | gun | total |
| radio | oxygen | similar | deal |
| we'll | plural | death | determine |
| action | various | score | evening |
| capital | agreed | forward | hoe |
| factories | opposite | stretched | rope |
| settled | wrong | experience | cotton |
| yellow | chart | rose | apple |
| isn't | prepared | allow | details |
| southern | pretty | fear | entire |
| truck | solution | workers | corn |
| fair | fresh | Washington | substances |
| printed | shop | Greek | smell |
| wouldn't | suffix | women | tools |
| ahead | especially | bought | conditions |
| chance | shoes | led | cows |
| born | actually | march | track |
| level | nose | northern | arrived |
| triangle | afraid | create | located |
| molecules | dead | British | sir |
| France | sugar | difficult | seat |
| repeated | adjective | match | division |
| column | fig | win | effect |
| western | office | doesn't | underline |
| church | huge | steel | view |

http://www.k12reader.com

Name $\qquad$ Date $\qquad$

Which of the following types of books do you like? For each type of book that you like, try to think of an example or a specific topic. This will assist me in helping you find more great books!

Nonfiction Examples of Topics or Books You Like
$\qquad$
Fiction
a Mystery $\qquad$
Adventure $\qquad$
Fantasy $\qquad$
Realistic Fiction $\qquad$
Historical Fiction $\qquad$
Science Fiction $\qquad$
Humor $\qquad$
Animal Stories $\qquad$
Source: Laura Candler

Appendix L: Reading Conversion Chart

| $\begin{aligned} & \text { Learning } \\ & \hline A-Z \end{aligned}$ | Ages | Learning $A$－ 2 Correlation Chart |  |  |  |  | Lexile |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grode | Fountos \＆Pinnell | Reading Recovery | DRA | PM Readers |  |
| 圆 | 4－6 | K | A | 1 | A－1 | Starters 1 | BR－70 |
| A | 4－6 | K | A | 1 | A－1 | Starters 1 | BR－70 |
| B | 4－6 | K | B | 2 | 2 | Starters 2 | BR－70 |
| C | 4－6 | K | C | 3－4 | 3－4 | 3－4 red | BR－70 |
| D | 4－7 | 1 | D | 5－6 | 6 | 5－6 red／yellow | 80－450 |
| E | 6－7 | 1 | E | 7－8 | 8 | 7－8 yellow | 80－450 |
| F | 6－7 | 1 | F | 9－10 | 10 | 9－10 blue | 80－450 |
| G | 6－7 | 1 | G | 11－12 | 12 | 11－12 blue／green | 80－450 |
| （4） | 6－7 | 1 | H | 13－14 | 14 | 13－14 green | 80－450 |
| $\square$ | 6－7 | 1 | 1 | 15－16 | 16 | 15－16 orange | 80－450 |
| 0 | 6－8 | 1 | J | 17 | 18 | 17 turquoise | 451－500 |
| 圆 | 7－8 | 2 | J | 17 | 18 | 18 turquoise | 451－550 |
| $\square$ | 7－8 | 2 | K | 18 | 20 | 19－20 purple | 501－550 |
| 國 | 7－8 | 2 | L | 19 | 24 | 21 gold | 551－600 |
| N | 7－8 | 2 | M | 20 | 28 | 22 gold | 551－650 |
| 0 | 7－8 | 2 | M | 20 | 28 | 22 gold | 601－650 |
| P | 7－8 | 2 | M | 28 | 28 | 22 gold | 601－650 |
| ＠ | 7－9 | 3 | N | 30 | 30 | 23 silver | 651－690 |
| 圆 | 8－9 | 3 | N | 30 | 30 | 23 silver | 651－730 |
| 5 | 8－9 | 3 | 0 | 34 | 34 | 24 silver | 691－770 |
| 回 | 8－9 | 3 | P | 38 | 38 | 25 emerald | 731－770 |
| 0 | 8－11 | 4 | Q | 40 | 40 | 26 emerald | 771－800 |
| © | 9－11 | 4 | Q | 40 | 40 | 26 emerald | 771－830 |
| 恜 | 9－11 | 4 | S | 40 | 40 | 27 ruby | 801－860 |
| ＊ | 9－11 | 5 | S | 40 | 40 | 28 sapphire | 831－860 |
| Y | 9－11 | 5 | T | 40 | 40 | 29 sapphire | 861－890 |
| 回 | 9－11 | 5 | U－V | N／A | 50 | 30 sapphire | 891－980 |
| This correlation chart illustrates how Learning A－Z levels approximately correlate to other leveling systems commonly found in leveled reading materials．Learning A－Z uses objective （quantitative）and subjective（qualitative）Leveling Criteria to measure text complexity． Learning A－Z |  |  |  |  |  |  |  |

Appendix M：Sample Leveled Reader

www.readinga-z.com

Source: Reading A to Z

# The Titanic: Lost and Found 



Written by Lisa Trumbauer
www.readinga-z.com

Source: Reading A to Z


## Table of Contents

The Grandest Ship ..... 4
At Sea ..... 7
We're Sinking! ..... 9
Rescued ..... 12
Found! ..... 13
Titanic's Legacy ..... 15
Glossary ..... 16
Index ..... 16

Source: Reading A to Z

## The Grandest Ship

When it was built, many people thought it was the grandest ship to ever sail the seas. Others claimed it was the biggest, and some people even said it was unsinkable.

But on Sunday, April 14, 1912, just before midnight, disaster struck. Within hours the Titanic, the most magnificent ship of


4

Source: Reading A to Z

The Titanic was built in Northern Ireland to take people and cargo across the Atlantic Ocean. Airplanes were still new contraptions in 1912, so the only way to travel from Europe to the United States was by boat.

Passengers began boarding the Titanic on Wednesday, April 10, in Southampton, England. They were thrilled to be on what was considered the grandest ship in the world. It was the ship's first trip, also called its maiden voyage, and it would take one week to reach New York.


The Titanic: Lost and Found • Level S

Source: Reading A to Z

Wealthy people traveled in style aboard the Titanic. They had fancy rooms for dining and elegant rooms for sleeping. First-class rooms perched at the top of the ship and offered the best views and fresh air. The Titanic even had four elevators and a lavish staircase.


A detailed copy of the Grand Staircase

People who did not have a lot of money traveled in less spacious quarters at the bottom of the ship. This area was called steerage, and the rooms were cramped and crowded. Steerage passengers were not allowed to go to the upper levels of the ship.

## Do You Know?

A person's "class" was one's status in society based on how much money he or she made. "Upper-class" people had a lot of money, whereas "lower-class" people had little. In 1912, different classes were separated.

How much did it cost to travel on the Titanic?

| First Class: | $\$ 4,350.00$ per person |
| :--- | ---: |
| Second Class: | $\$ 65.00$ per person |
| Third Class: | $\$ 35.00$ per person |

Source: Reading A to Z


The dotted line shows the first, and only, voyage of the Titanic.

## At Sea

After leaving Southampton, the Titanic stopped in France, then in Ireland, picking up a few more passengers. Finally, on Thursday, April 11, the Titanic set sail for the cold, open sea of the North Atlantic Ocean.

The Titanic must have been a marvel to behold as it glided across the ocean. It was the biggest ship of its time. It was 269 meters ( 883 ft ) long-about the length of 55 cars parked bumper-to-bumper. It was also as tall as a ten-story building- 32 meters ( 104 ft ). Its four towering smokestacks stood 19 meters ( 62 ft ) tall, which is more than 15 fourthgraders standing on one another's shoulders.

Three days after leaving Southampton, the Titanic was well into the North Atlantic. This area was known for icebergs, and the ship's workers were responsible for watching out for these dangerous chunks of floating ice.

That Sunday evening the sea was calm. No white-capped waves crashed against the rugged icebergs, which would have made the ice easier to spot. Also, the night was ominously dark and cloudless. No moon shone over the still, open waters.

Then, at 11:40 PM, the crew and other passengers felt a jarring thud against the side of the ship. The Titanic had struck an iceberg. No one panicked, though, because they believed the Titanic was unsinkable.

One person on board knew differently.

## A Chilly Discovery

Icebergs are actually bigger below the surface of the water than above it! The Titanic did not hit the part of the iceberg that you can see. Instead, it hit the larger part of the iceberg below the surface.



Titanic passengers in one of the few lifeboats

## We're Sinking!

That person was Thomas Andrews, who had helped design the Titanic. He soon realized by the way the ship was behaving that it was in grave danger. As calmly as possible, the unsuspecting passengers were awakened and told to put on their life jackets. Women and children in first class were ushered into lifeboats, which were then lowered to the ocean far below. People waited patiently for their turns, still not understanding the danger that faced them.

Source: Reading A to Z


This famous painting shows the Titanic's last moments.

Yet all too soon, it became evident to everyone on board that the Titanic was in dire trouble. The supposedly unsinkable ship was sinking, and it did not have enough lifeboats for everyone. Resolutely, the ship's band stayed on deck and played music to keep everyone calm.

Some people prayed quietly and waited for the worst. Others frantically grabbed objects that might help them float in the water. Still others desperately clung to the ship's deck as it lifted into the air.

## 10

## Rescued

In the earlymorning hours of Monday, April 15, the Carpathia arrived to rescue the Titanic's exhausted and grief-stricken survivors. About 700 people had survived in the few lifeboats, but about 1,500 had perished. Most had not drowned,


The front page was filled with the Titanic's story. however. Floating in their life vests, most had died from the extremely cold temperatures of the North Atlantic.

The world was stunned by the loss of the Titanic. How could such a magnificent ship, one that was called "unsinkable," go down so quickly? Several decades later, many questions would be answered.


The Carpathia


The bow of the Titanic at the bottom of the North Atlantic Ocean

## Found!

In 1985, something extraordinary happened. The Titanic was found about four kilometers ( 2.5 mi ) beneath the sea at the bottom of the North Atlantic Ocean. Scientists could finally find their answers about how the ship sank so quickly.

Scientists sent robotic devices to explore and videotape the wreckage. The ship's ghostly form appeared eerily on the video monitors, its front railing recognizable, even after seventy years below water.

Source: Reading A to Z

Scientists confirmed that the ship had broken into two parts. But what about the

Source: Reading A to Z

## Titanic's Legacy

Because of the Titanic, many lessons were learned and new rules were applied to make ships safer. Today, a ship must have enough lifeboats for all its passengers, and
 lifeboat drills must be conducted so everyone knows what to do in case of an emergency. Ships must also keep their radios on 24 hours a day. And the International Ice Patrol, an organization that keeps track of the location of icebergs, Lifeboats on a modern ship was established.

The Titanic was a grand ship, and her story is just as grand. The legacy of the Titanic lives on in the memories of the lives lost, the lessons learned by the tragedy, and the changes that such a tragedy brought to sea travel.

Source: Reading A to Z

## Photo Credits:

Front cover: © Mary Evans Picture Library; back cover: courtesy of Library of Congress, Prints \& Photographs Div [LC-USZ62-34781]; title page: © Raymond Wong/National Geographic Stock; page 3: courtesy of Library of Congress, Prints \& Photographs Div [LC-USZ62-94037]; pages 4, 5: © Mary Evans Picture Library/Onslow Auctions Limited; page 6: © Sven Kaestner/AP Images; pages 8, 9, 15: © Jupiterimages Corporation; page 10: © Willy Stöwer-ullstein bild/The Granger
Collection, New York; page 11: courtesy of Library of Congress, Prints \& Photographs Div [LC-USZ62-33430]; page 12 (top): © The Granger Collection, New York; page 12 (bottom): courtesy of Library of Congress, Prints \& Photographs Div [LC-USZ62-121012]; page 13: © REUTERS

Page 3: Molly Brown, nicknamed "Unsinkable," was one of many famous people on board the Titanic. She survived.

The Titanic: Lost and Found
Level S Leveled Book
© Learning A-Z
Written by Lisa Trumbaver
Illustrated by Craig Frederick
All rights reserved.
www.readinga-z.com

Correlation
LEVEL S

| Fountas \& Pinnell | O |
| :---: | :---: |
| Reading Recovery | 34 |
| DRA | 34 |

Source: Reading A to Z

## The Titanic: Lost and Found <br> A Reading A-Z Level S Leveled Book Word Count: 1,094



Source: Reading A to Z

Appendix N: Sample Letters to Parents

## Title I Reading

Dear Parents,
August 2013

In an effort to boost reading fluency, I have put together a homework folder of activities for you to do at home each day with your child. Each student in Title I Reading will have the opportunity to earn a reward by reading, completing the activity and getting your signature on their calendar.

Here's what to do:

1. Review the daily homework on the homework sheet with your child.
2. Have your child read their take-home book to you or another adult. Please look for it daily in the folder marked Title I Reading. Periodically, students will take home a news article to read as well.
3. Each day we will focus on a different reading skill to help improve their decoding and fluency. As your child is reading to you, have him/her point out the phonics skill we are working on for the week. For example, diagraphs, sh, $\mathrm{ch}, \mathrm{ck}, \mathrm{th}, \mathrm{wh}$, and ph. I want them to apply the skill and sound they have learned in class within the authentic literature. This skill is listed on the weekly homework sheet.
4. Another activity to complete for homework will be to circle the unknown words in the leveled reader. Students are to use fix-it strategies to figure out the word and then select one word to analyze.
5. A third activity your child may have for homework is for you to read a paragraph or page from their book and then they read it. This is called Echo Reading and helps to model expression and phrasing when reading.
6. Take time to talk about the book and have your child make connections. They can do this by relating it to their own life/experiences, relating it to another book, or by relating it to a world event.
7. To indicate that your child has read the book to an adult, please sign the enclosed calendar each day. The folders should be returned daily so I can give rewards to those who do their homework. Each week, student will receive a new leveled reader or news article. Students will reread the same book all week. Rereads are an important part of building fluency.

Reading is supposed to be fun, so if you see your child getting frustrated alternate reading the pages of the book with your child. My goal is for your child to develop a lifelong love for reading. If you have any questions, please feel free to contact me at $\qquad$ .

As part of the Title I program, your child is required to read for 20 minutes or longer each night. To make this a fun activity, I listed some suggestions below.

## 12 Ways to Motivate Reluctant Readers:

- Read aloud to your child. You can either read a picture book or chapter book together. Try taking turns reading pages from a book that is a little more challenging.
- Let your child choose their own book. Encourage them to try different types of books, authors and genres. They might be surprised by what they like.
- Provide a consistent time for reading each day. Before bedtime is always relaxing and a great way to end the day. Most importantly make sure the room is quiet and there aren't any distractions.
- Allow your child to create a cozy reading area somewhere in your home. They are more likely to want to read if they are comfortable.
- Talk to them about what they are reading. See if they get the gist of the story. If not, suggest selecting another book. It is also a great time to make connections between the story in the book and real life. Your child will enjoy sharing and it will encourage your child to keep reading.
- Read what your children are reading. It sets a great example, helps you decide whether the book is appropriate or not and it will give you great topics for conversation.
- Introduce them to audio books. This is a great resource for students who struggle with the pronunciation of new words. It also reinforces what your child read.
- Make reading social. Form neighborhood book talk groups or join one at the local library or book store.
- Allow your child to read a variety of media. Magazines, graphic novels, safe websites, instructions, etc...
- Get them hooked on a series. Once your child finishes the first book, he/she will be eager to read the second book.
- Encourage them to share their books at school during Book Talk. Remind your child to summarize the book ahead of time so he/she is prepared.
- Use Technology. It doesn't matter whether your child is reading a book or an ebook, as long as he/she is reading.
- Echo Reading: You read a paragraph and then your child reads a paragraph. They copy your tone, expression, phrasing, and fluency.

If you have any questions, please call or email. Thank you for your support in your child's journey through reading.

## Appendix O: Family Literacy Night

## How Can I Help My Child with Reading?

In the Reading section of this web page you will find all of the resources to help your child with their reading at home. Follow the process below and click on the suggested links.

## 1. Select a "Just Right Book".

Read about the five finger rule for selecting a "Just right" book. Help your child select a book or use their leveled reader. All of the students know their reading level from class.

## 2. Decode New Words.

Read the book or leveled reader with your child. Have your child select one word they do not know how to pronounce. Select a strategy for decoding the word from the strategy book mark. If that strategy does not work, try another until your child figures out the word. Remember, if there are more than 3 words on a page that your child does not know, then the book is too difficult for them to read independently.

## 3. Fluency is Not Speed!

Fluency is often referred to how fast and accurately a child is reading. However, there is more to fluency than speed.
Fluency is also reading with expression and in phrases. This allows the reader to understand what they are reading while they are reading. Fluency is the bridge that connects decoding and reading comprehension. Select a fluency strategy to try with your child, for example: echo reading.

You read a page or paragraph and then your child reads a page or paragraph. They copy your intonation, expression, and rate. Use the book or leveled reader from 1 to practice this strategy. Fluency takes practice. Children need to read daily to improve their fluency.

## 4. What is Vocabulary?

There are two types of words, phonetic words (words that can be sounded out) and sight words (words that need to be memorized because they cannot be sounded out). The sight words recommended for your children to learn are called the Fry Sight Words. Your child needs to know how to read and write these words from memory.

The best way for children to build vocabulary is by identifying new words when they are reading and using these words in their writing. Another method used to build vocabulary is by playing a game with new words.
Concentration, word sorts, and word ladders are just a few examples.

Students can practice vocabulary building at my Moodle page.

## 5. Don't forget Comprehension!

Comprehension takes place when a child gains meaning from what he/she has read. As text levels become more difficult, the demand for the comprehension required to read and understand the text will increase.
Select one reading comprehension strategy to try with your child. Use the book or leveled reader selected from 1. Try the comprehension strategy suggested in the weekly
homework. I focus on one reading comprehension strategy per week in Title I. You will see this on your child's homework sheet. This will reinforce what we are doing in class.

Appendix P: Parent Resources on Website

## An Introduction:

## Title I Reading

Most adults do not remember how or when they learned how to read. Children learn to read at different ages, usually when they are developmentally ready. When students lag behind because they are not ready to learn how to read, they struggle. As they get older, the gap widens because they are constantly playing catch-up in every grade thereafter.

How do we stop the gap from widening? Intervention is the key. Meeting children where they are in their stage of development, building a strong foundation of phonics and reading strategies, and providing opportunities to practice reading within authentic literature will help to close the gap and prevent it from growing larger.

Title I Reading is an intervention that will provide your child with these opportunities. The road to closing the gap is not easy. There will be many challenges along the way. The journey will require hard work and dedication to the program by both you and your child. The destination in the end, however, is worth the effort. Your child will learn how to become a life-long reader and how to enjoy a life of reading if they give the program their best effort.

Learning does not stop once children leave school for the day. Practice at home will provide your child with the opportunity to practice newly learned strategies in the
comfort of their own home. The reading section of this web page is designed to help you help your child with their Title I assignments. Each section of reading, phonics, fluency and comprehension are taught simultaneously in the classroom, however; they are separated on this web page to provide a better explanation of them. Please use this web page to help to navigate through the Title I program. If you have any questions at any time, please feel free to contact me.

## Bridging the Gap between Decoding and Comprehension

When children are younger, they learn the English language by listening to people around them who speak it. Once children enter school, they can speak English, but may not be able to write in English. They begin to learn a sound/symbol system known as phonics in Kindergarten. Letters are connected with sounds and then eventually words. Words are then connected to form phrases and then sentences.

Words, phrases, and sentences do more than make sounds, they also carry meaning. As a child learns how to read, they are not just decoding words, they are also creating meaning. This is where fluency plays a part in learning how to read. Fluency bridges the gap between decoding and comprehension by moving the child from word calling to meaning making. Rate and accuracy only play a part in reading fluency. True fluency also includes expression, intonation and response to punctuation. When a child begins to use expression, intonation and punctuation cues, he/she begins to understand what they reading.

By the time students reach fourth grade, they are preparing to move their reading to a deeper level. Finally, children are ready to think about their thinking. This is called metacognition. When a child moves to this type of thinking, their understanding of what is read begins to play like a movie in their head. Using metacognition to
think about decoding helps children to understand decoding better and allows them to transfer the thinking from decoding to comprehension.

The sounds of letters, diagraphs, blends, and welded sounds make up phonics in the English language. Below are different letters or groups of letters that create a sound. If the letters are broken apart, they will create a different sound than if they remain together. For example, /an/ together sounds different than /a/ /n/
separately. The groups of letters are better remembered as chunks making a sound rather than individual letters making the sound.


Protector -ck!

1. Use - ck to protect a weak vowel
on its own

2. Use - K where the vowel has a letter friend and does not need


Example: pink
3. Use - Ka when a vowel is strong
and Cong
Example: pike


Normals like..../k/ Init
Mow is it spelled?
Use -ck when...

- the vowel is short


Examples: pack, sock, trick
or

- when adding -ing or -ed to words ending in just $c$ (first change the ending to $-c k$ )

Examples: picnicking and panicking


Use -k when...

- there is a vowel team before the $/ \mathrm{k} /$ sound

Examples: book, seek
or


- there is a vowel and consonant before the $/ \mathrm{k} /$ sound

Examples: park, hawk, milk
Use -ke when...


- the vowel is long

Examples: cake


Use -c when...

- the sound $/ \mathrm{k} /$ is heard in the middle of a word

Examples: deduct, locate, subtraction, correct or

- if the word is multi-syllabic


Examples: panic, traffic, picnic


DIGRAPHS:
sh




Source: adapted from Wilson Just Words


$$
\begin{aligned}
& \text {-old } \\
& \text {-olt } \\
& \text {-ost }
\end{aligned}
$$

Adapted from Wilson Just Words by Barbara Wilson

## Welded Sounds:



Adapted from Wilson Just Words by Barbara Wilson

## Bonus

## Letters?

If a one syllable cvc word ends in a bonus letter...

# Double it! 

## Bonus Letters:

## ff

||

## Mark:

puff
$\pi$
tt

Adapted from Wilson Just Words by Barbara Wilson
Word Attack Strategies for Parents

## Word-Attack Strategies

Word-attack strategies help students decode, pronounce, and understand unfamiliar words. They help students attack words piece by piece or from a different angle. Model and instruct students:

## Use Picture Clues

- Look at the picture.
- Are there people, objects, or actions in the picture that might make sense in the sentence?


## Sound Out the Word

- Start with the first letter, and say each letter-sound out loud.
- Blend the sounds together and try to say the word. Does the word make sense in the sentence?

Look for Chunks in the Word

- Look for familiar letter chunks. They may be sound/symbols, prefixes, suffixes, endings, whole words, or base words.
- Read each chunk by itself. Then blend the chunks together and sound out the word. Does that word make sense in the sentence?


## Connect to a Word You Know

- Think of a word that looks like the unfamiliar word.
- Compare the familiar word to the unfamiliar word. Decide if the familiar word is a chunk or form of the unfamiliar word.
- Use the known word in the sentence to see if it makes sense. If so, the meanings of the two words are close enough for understanding.


## Reread the Sentence

- Read the sentence more than once.
- Think about what word might make sense in the sentence. Try the word and see if the sentence makes sense.


## Keep Reading

- Read past the unfamiliar word and look for clues.
- If the word is repeated, compare the second sentence to the first. What word might make sense in both?

Use Prior Knowledge

- Think about what you know about the subject of the book, paragraph, or sentence.
- Do you know anything that might make sense in the sentence? Read the sentence with the word to see if it makes sense.

Source: Reading A to Z

## Reading Comprehension

Once your child has figured out how to decode words, he needs to understand what to do with those words. Fluency plays a big part in reading comprehension

because as a child strings words together, he creates meaning. Reading the words on a page without thinking about those words is not fluency. Comprehension takes place when a child connects deeper meaning to what he is reading. Reading comprehension strategies include:

## Building vocabulary and background information:

Building vocabulary by investigating words in their reading helps to build meaning. It also helps to read many types of books with a similar theme to build background knowledge.

## Predicting:

When a child predicts what will happen next in the story, he is setting a purpose for reading and creating a desire to continue reading.

## Asking Questions/Clarifying:

When child asks questions while he is reading, he is also setting a purpose for reading. He wants to find the answers to his questions. This builds anticipation as well. Asking questions also helps a child to stay focused on the story and to look for clues for drawing conclusions.

## Drawing Conclusions/ Inferring:

Drawing conclusions is taking clues that the author has scattered throughout the story, adding the clues up, and then drawing a conclusion based on the clues. Inferring is more wondering and deeper thinking rather than collecting clues.

## Visualizing ( 5 senses):

One of the best ways for children to visualize is to have them use their five senses to get the full effect of the
story. For example, the child may smell cookies baking in the oven, he may feel the sun beating down on his skin, making him warm, he may hear the traffic below and wonder what time of day it is, and he may taste the bitter sweet flavor of apple pie. Using all of the senses, the child's 2-D image of the story changes into a 3-D image.

## Summarizing:

Summarizing or retelling a story gives your child's teacher a strong picture of what your child remembers from the story and what is forgotten. The FAB 5 Summary sheet for fiction or nonfiction is a great tool to help students gather the information from the story while helping them stay focused.
*see Fab Five attachment

## Self-monitoring

Self-monitoring takes place when a child thinks about what he is reading while he is reading. It includes some of the following types of thinking:

This book has over three words on a page that I do not know. It is probably too hard and I should pick out another book.

Did the word in the sentence I just read make sense?

Where did my understanding break down?
I just read the page and do not remember what I read. I should go back and read it again.

I cannot hear the voice in my head while I'm reading, so I am lost. I need to go back to where I last heard that voice and read again.

# Educational Websites to Use with Children 

## Reading Help

## Starfall

Starfall is an excellent website with fun, interactive games and lots of other activities "to teach children to read with phonics. Our systematic
phonics approach, in conjunction with phonemic awareness practice, is perfect for preschool, kindergarten, first grade, second grade, special education, homeschool, and English language development (ELD, ELL,ESL). Starfall is an educational alternative to other entertainment choices for children." It's widely considered one of the best.
http://www.starfall.com/

## RIF's Reading Planet

Offers interactive reading-based games, activities, and age-appropriate book suggestions for children to enjoy.
http://www.rif.org/kids/readingplanet/gamestation.htm

## PBS Kids and Word Games

This is one of the many fun activities the PBS Kids website has to offer to children. When you've finished with some word games look around the website for more.
http://pbskids.org/zoom/activities/games/\#word
Also check out Word Quest http://pbskids.org/wordquest/\#/login

## Vocabulary and SpellingCity

Children can enter their spelling and vocabulary words on-line and have this website make their homework into fun games.
http://www.spellingcity.com

## Fun Brain

This site provides fun word games like Mad Libs as well as on-line books such as Diary of a Wimpy Kid. There are other great math and learning games here too.
http://www.funbrain.com

## Sprout On-line

For the preschool set, there's Sprout on-line. It has lots of games and activities that children 5 and under will enjoy.
http://www.sproutonline.com

## Reading Rockets

This site provides lots of reading help for parents, mentors, and teachers. It has a section entitled "Helping Struggling Readers" that is particularly helpful for anyone with reluctant readers or children who seem to be slower to catch on.
http://www.readingrockets.org/helping

## Alphabet Printable Activities

Just as its title suggests, this website is full of great, printable alphabet activities for young children.
http://www.first-school.ws/theme/alphabetp1.htm

## Colorín Colorado

Readingtips in English and Spanish for parents to use with children from birth through the third grade. Bilingual.
http://www.colorincolorado.org/guides/readingtips

## Thinkfinity

This is one of the most comprehensive on-line resources for adult and family literacy in theU.S. Bilingual.
http://www.readwritethink.org/parent-afterschool-resources/spanish/

## Florida Center for Reading Research

This website is a goldmine of literacy activities for adults to use with children. Developed for teachers, it has activities broken out by age and developmental skill sets.
http://www.fcrr.org/

## Parts of Speech

Offers Powerpoints for adults and interactive activities for children about the parts of speech and math.
http://www.languagearts.pppst.com/partsofspeech.html

## Word Girl Synonym Toast

Offers a fun game allowing children to find synonyms for words and challenge their friends when they've finished.
http://www.scholastic.com/wordgirl/synonym_toast.htm

## Grammar Glossary

An on-line resource for definitions of some of those tricky grammar concepts for grades K-6.
http://www.harcourtschool.com/glossary/grammar/index_pt.html

## Fact Monster

Find fun facts about most subjects and quizzes and games.
http://www.factmonster.com/

## Parenting Help

## Parenting from Boys Town

This website provides parents with helpful strategies to raise healthy, welladjusted young people. Subjects range from motor skills to social skills, medical and school issues to age-appropriate behaviors.
http://www.parenting.org

## PBS Parents

PBS has been in the business of educating while entertaining children since before the invention of Sesame Street! This website is a go-to resource for parents that also has a great $\mathrm{Q} \& A$ section.
http://www.pbs.org/parents/

## Common Sense Media

This website has a wealth of information on selecting age-appropriate media for your child. It includes parents' and children's reviews of movies and books and has a unique rating system to show what types of adult issues might be located in the media your children are selecting.
http://www.commonsensemedia.org/

## Ready At Five

This website is full of great activities to insure your child's school success. The website contains activity calendars and other resources in both English and Spanish.
http://www.readyatfive.org

## Disney's Family Fun

This website contains printable, Disney-related activities and lots of other "family fun" activities from recipes to weekend getaways, to how to celebrate Chinese New Year.
http://www.familyfun.com

## Family Education

This website gives parents resources beginning with pregnancy all the way through their child's 18thbirthday. It contains parenting blogs, a toy finder, printable activities, and fun quizzes for parents to take about parenting.
http://www.familyeducation.com

## Screen Your 4 Year Old's Pre-Reading Skills

This test allows you to track your baby's reading progress by taking the same test twice throughout the year.
http://school.familyeducation.com/reading/early-learning/46528.html

Appendix Q: "Just Right" Book

## How to Choose "Just Right" Books

1. Look at the cover.
2. Read the title and the author.
3. Read the blurb in the

How to Choose "Just Right" Books

1. Look at the cover.
2. Read the title and the author.
3. Read the blurb in the

## Appendix R: Six Syllable Types

## 6 Syllable Types

The phonetic words in the English language make up $60 \%$ of our words. The syllables of the words fall into one of six syllable types. These syllable types can be used to decode unknown words. A syllable can be a whole word or part of a word.

The remaining $40 \%$ of English words are sight words. These are either words that cannot be sounded out or words that we use so frequently that we recognize them by sight. These words need to be memorized.

The six syllable types are explained below:
Closed Syllable
v-e Syllable
Open Syllable
-Le Syllable
r-Controlled Syllable

"D" Double Vowel Syllable
*-sion/-tion make up another syllable type, but are not considered one of the six.

Adapted from Wilson Just Words by Barbara Wilson

## Closed Syllable Rule

When a vowel is closed in by two consonants or a vowel starts the word and is closed in by a consonant, then the vowel will be short.

## Examples:

cat (cvc pattern) The a is short because it is closed in the t . The $t$ stop it from saying its name.
up (vc pattern) The $u$ is short because it is closed in by the p .

Marking the words:
cat
C
up
C

## Exceptions:

Welded bandits make up the exceptions. These are chunks of words that should have a short vowel sound, but they have a long vowel sound instead.
Bandits: -ild, -old, -ost, -olt, -ost

Marking the bandits:

$$
\frac{\text { wīld }}{x}
$$

Adapted from Wilson Just Words by Barbara Wilson

## Vowel-consonant-e Syllable

This syllable makes up any word with a vowel, then consonant, and then e. The e on the end of the word allows the vowel to say its name.

## Examples:

bake (cvce pattern) The a is long because it is opened up by the silent e.
ate (vce pattern) The a is long because it is opened up by the silent e.
mis/take (cvc/cvce) The a is long because it is opened up by the silent e.

Marking the words:
bāke
v-e
ate,
v-e
mĭs/take
cvc/v-e

## Exception:

$g$ Ĭve
P6

Vowel-Consonant-e Syllable:
a



Open syllables are the opposite of closed syllables. The vowel is not closed in by a consonant so it can say its name therefore it will be long.

## Examples:

hi: (cv pattern) The i is not closed in so it says i.
hap/py: (cvc/cv pattern) The y is not closed in so it says e. In this case the $y$ is acting like a vowel. At the end of a one syllable word it says i and at the end of a two syllable word it says e.

Marking the words:

$$
\frac{\mathrm{hi}}{\mathrm{o}}
$$

$$
\begin{aligned}
& \text { hăp/py } \\
& \text { c/o }
\end{aligned}
$$

## Exceptions:



Adapted from Wilson Just Words by Barbara Wilson

## r-Controlled Syllable

$R$ is a strong consonant that controls the
vowel in front of it. -ar and -or have their own
unique sounds, however, -er, -ir, and -ur all
sound alike. Because they sound alike, the only way to remember to spell them is to memorize the words.

Since the r controls the sound the words are not marked closed, but r-controlled (r). The vowel plus the $r$ only get one tap. If the $r$ is followed by an e, the syllable type then becomes v-e.
Fळrexample: $\frac{\text { car }}{r} \frac{\text { care }}{\text { v-e }}$

Adapted from Wilson Just Words by Barbara Wilson
R-Controlled Syllable
ar
car
/ar/



There are two types of vowel teams, vowel digraphs and vowel diphthongs. A vowel digraph is two vowels combined together to represent one sound (ee). A vowel diphthong is a sound that begins with one vowel sound and blends into another (oi).

Double vowels are marked with a " d ".
For example:

```
bait
    d
```


## Exceptions:

| cre/ate | The e and the a are separated by a <br> o $/ v$-e <br> vowel syllable. |
| :--- | :--- |

Adapted from Wilson Just Words by Barbara Wilson

## "D" Double Vowel Syllable


/a/ -
ay
ee

/a/ ${ }^{-}$


In the -le syllable, there is not a vowel sound. The e is silent. The only letter that can be changed in this syllable type is the first consonant.

## For example:

-zle -tle -fle -ble -dle -kle -ple

candle


## Marking:

| $\underline{\text { ta/ble }}$ | $\underline{\text { rid/dle }}$ |  |
| :--- | :--- | :--- |
| o/-le | $\mathrm{c} /-\mathrm{le}$ | $\mathrm{mar} / \mathrm{ble}$ |
| r |  | r-le |

Rule Breaker: The t is silent in -tle.
cas/tle
c / -

## -sion or -tion Syllable

The syllables -sion and -tion are considered welded sounds. This means together they make one sound, but broken apart they will not make the same sound. If the word has a base or root word, this determines whether the will be spelled -sion or -tion.

## Sounds:

$$
\begin{aligned}
& - \text { sion }=/ \text { shun/ } \\
& \text {-tion }=/ \text { shun/ } \\
& \text {-sion= /zhun/ } \\
& \text {-ssion= /shun/ }
\end{aligned}
$$

## Examples:

Word:
Sound: Base Word:



Finding the syllable in a word can be tricky. Follow these rules below when sounding out an unfamiliar word.

## Compound Words:

-The syllable divide is between the two words.

Example: cup/cake

## Two or more syllable words:

-The general rules are:


1. There can only be one vowel sound per syllable. It can be made by one or two vowels.

Examples: a, e, I, o, u, or oa, ie, ay, ea, and other double vowels.
2. When the word has 2 consonants after a vowel, one consonant goes with the one syllable and the other consonant goes with the other syllable.

Example: muf / fin
3. The only time you cannot break two consonants apart into different syllables is when it is a digraph. (th, sh, wh, ph, ck, ch)

## Example: jack / et

 buck/et4. When there is only one consonant separating two vowels, the consonant usually goes with the second or next syllable. This is where it gets tricky. You have to try the syllable line before and after the consonant and say the word. Ask yourself, which word do you recognize? Which one makes sense in the sentence?

Example: de / port and ra/dar Rule breakers: hab / it
5. Mark your syllables. This will help you decide if the vowel sound is long or short. Remember, the consonant after a vowel in a syllable stops the vowel from saying its name.

Appendix S: Rules of Spelling
The

## Spelling



Rules



## Of

## English

## Rules when using -s or -es:

1. Nouns ending in: $s, x, z, c h$, and sh will use-es.
2. -s or -es are added to nouns to show more than one (plural).
3. When -s is at the end of a word is can say
|s/ or |z|.

/s/

|z|
4. When -es is at the end of a word it says $/ z /$.

Examples:
-s
seats
pens
books
toys
trees
rooms
-es
benches
buzzes
gases
boxes
bushes
churches
5. Verbs ending in -s or -es show subject-verb agreement. It does not show more than one (plural).

Verb: to go

I go
You go He/She/lt goes

We go
They go

Source: Adapted from Wilson Just Words by Barbara Wilson

## Suffix -ed:

-ed can make 3 different sounds when added to the end of a word:
/d/: tuned

## /ed/: acted

## /t/: jumped

-ed tells you an action happened in the past.
-adding -ed to a word can add a syllable to the word:
Base word Base word with suffix

## Suffix -ing:


-ing only makes one sound
-ing tells you an action ahppend in the present -adding -ing to a word can add a syllable to the word

Base word Base word with suffix
run
run•ning

## Suffix -er:

-er can have 2 different meanings:
/er/: a job of some sort

Example: baker

/er/: in comparison to something else
Example: bigger
-adding -er to a word can add a syllable to the word:
Base word Base word with suffix
bake
bak•er

## Suffix -est:

-est only has one meaning:

# /est/: in comparison to something else 

Example: biggest
-adding -est to a word can add a syllable to the word Base word Base word with suffix
big
big•gest

## Doubling Rule

 1-1-1

Rule: When the end of a word follows the CVC pattern, double the final consonant when adding -ed or ing.

$$
\begin{aligned}
\text { Example: hop }= & \text { hopping/hopêed } \\
& \text { Mop }=\text { mopping } / \text { mopped }
\end{aligned}
$$

Marking: hopping/hopped**
*Do not use doubling rule on consonant suffixes: ful, less, ment, and ness.

## Be Careful:

v-e words drop the e before adding -ing or -ed, so they can look very similar. Here's how to tell the difference:
v-e Word:
hope
hoping/hoped


## -ive is a vowel-consonant-e word part (V-E)

-This should be a long vowel sound like in hive

$$
\underline{\text { hive }}^{-}
$$


-The consonant $v$ will never stand alone at the end of an English word.
-The letter $e$ always follows $v$ at the end of the word unless the word is an abbreviation, an acronym, or a name.

## 



Appendix T: Tap it Out!

## Tapping the Words

To sound out an unfamiliar word, students will be using a technique called tapping. Below is a set of directions for students to practice tapping at home. If they get to a word in their reading that they do not know, please encourage them to tap it out. This works with $60 \%$ of the English language.

How to tap:
Consonants get 1 tap ( 1 sound)
Vowels get 1 tap (1 sound)
Digraphs get 1 tap ( 2 letters, but 1 sound)
ch, th, sh, wh, -ck
Welded sounds have 2 or 3 fingers welded together
(2 or 3 sounds)
-ank (3 fingers) -an (2 fingers)
Double vowels
-ai, ay, ee, ea, ey (one finger, 1 tap)

## Fingers up! Let's try:

$\checkmark$ thumb to index finger
$\checkmark$ thumb to middle finger
$\checkmark$ thumb to ring finger
$\checkmark$ thumb to pinky
$\checkmark$ go back to index finger and start over* When tapping a multisyllabic word, tap one syllable at a time and start over.

Adapted from Wilson Just Words by Barbara Wilson

Appendix $U$ : Fluency Activities
Flawless Ways to Fluent Reading

Do You Read Me? Modeling
The teacher and fluent readers are both good models. Commercial or teacher-made story tapes also serve this purpose.

How's That Again? Echo Reading

This technique has the student imitating the teacher's oral rendition, one sentence or phrase at a time. A session might begin with a taping of the student reading a passage, followed by echo reading, and culminating in a second taping of the student reading the same passage. The student compares the results and notes the improvement.

## All Together Now: Choral Reading

Less fluent readers are grouped with fluent readers as they read a selected passage in unison. The teacher either reads with the group or serves as a conductor.

## Follow the Reader: Neurological Impress

The teacher reads slightly ahead of, and louder than, the student. As the student gains fluency, the teacher's voice becomes softer and "shadows' (comes just behind) the student's. This is a highly effective technique, especially good with students acquiring English. It is labor intensive but could also be handles by aides or volunteers you have trained.

## Bit by Bit: Text Chunking

Students read aloud a passage that has been marked with slash marks to show phrase boundaries. Passages from poetry, speeches, or songs usually work best, although narrative with frequent punctuation marks can also be used.

## Twice Upon a Time: Repetition

The use of repeated readings-contextualized reading practice-is one of the most effective ways of improving fluency. The material should be "easy reads" for students, to provide problem-free reading experiences. These passages or selections should also be high-interest so that students will not become bored with the repetition.

## Take a Bow: Readers Theater

This technique gives groups of students an opportunity to practice and demonstrate fluency. Each student is assigned a particular role (one or more character's words or thoughts, the "narrator" who reads the narrative) to dramatize a story that is then presented to classmates.

## Reader's Theater Teaching Tips

## Using the Scripts

You can make the performance as simple or elaborate as you wish. For quick oral practice, students can read their lines while sitting at their desks. You also may perform reader's theater in the classroom simply by having the readers stand in front of the class to deliver their lines. You can
even create a full stage performance with costumes, props, and an audience of students, parents, and teachers.

You will need enough copies of the script for all students. Sharing scripts often leads to confusion and missed cues. Have students highlight their lines. It is also a good idea to review and pre-teach difficult vocabulary. Allow students plenty of opportunity to practice fluent delivery of their lines before performing reader's theater. A quick check of each student's reading will help you know when the cast is ready. Coach readers to occasionally look up from their scripts to make eye contact with the audience and other characters/readers as they read their lines.

It is always a good idea to allow more rehearsal time when applying extra touches, such as costumes or movement.

Due to the nature of character roles in the scripts, some roles will be larger than others. To evenly distribute lines, you may want to assign multiple small roles to one student or divide one large role between two or more students. Feel free to change character names to accommodate gender.

## Staging the Play

A few dramatic techniques can add an element of flair and fun to a performance. Encourage students to think about expressions and movements characters might make. For example, have students think about how people look and move when they are mad, happy, angry, or nervous. Have students practice facial expressions. If the characters are animals, have students practice animal movements. Allow them to create a "voice" for their characters. Let them ham it up and play creatively with the script to increase the entertainment value of the performance. But keep in mind that the most important purpose of reader's theater is to teach and practice fluent reading of printed text.

You can use portions of the classroom or the entire classroom as a stage. Students can use the floor, tables, and desks. Of course, make sure that students are careful and safe.

Use these simple tips to keep the performance smooth and entertaining.

- Make sure a reader is positioned within view of all members of the audience. It is important that the audience can hear lines and see movements and expressions.
- If you choose to place all the readers in front of the audience at once, it is helpful to have them stand in a semicircle so that each reader can be seen by all the other readers and by the audience.
- Don't allow one reader to block the audience's view of another reader.
- Remind students to look at, talk to, and react to the other readers/characters. However, the narrator may face and speak to the audience.
- As an alternative to having all the readers stand together in the performance area, you may want to direct the performance by having readers enter from and exit to the side before and after delivering their lines. Having readers move in and out of the performance area will require more rehearsal time.


## Extras: Costumes and Props

The face and head command the most attention, so a hat, mask, or makeup can work as an entire costume. Have students obtain permission before borrowing items from other people. It's best not to let them cut, paint, or modify any clothes unless you bring in special "costume clothes."

Students will have their scripts in hand while performing. Keep this in mind when choosing props; objects that require two hands may not be
practical. Encourage student imagination as they transform everyday objects into props.

Source: Reading A to Z

## WHO-WHO IS AFRAID OF THE DARK! LEVEL Q

A Reader's Theater Script
By Kitty Higgins
Word Count: 825

Characters:
Narrator
Scruff, a javelina (ha-va-LEE-na)
Who-Who, a barn owl
Polly, a pronuba moth
Zillard, a sidewinder rattlesnake

## Narrator:

After a long hot day, the desert begins to cool. The sun sets in the west over a distant mesa and the Joshua tree comes to life.

## Scruff:

Boy! Today was a scorcher.

## Who-Who:

That's for sure; by two o'clock it was 115 degrees in the shade. I predict that tomorrow will be even hotter.

## Scruff:

Thank you, "oh wise one." Let's just enjoy the cool evening and not think about tomorrow's heat.

Polly:
Hi guys, wasn't it hot today?

## Scruff:

I repeat, let's not talk about the heat.
Polly:
Well, it seems that the heat has someone feeling quite cranky!

## Source: Reading A to Z

## Who-Who:

Hi Polly, are you here to do some pollinating?

## Polly:

Yup. This old Joshua tree could use some new blossoms and I'm here to help.

## Who-Who:

You're not only here to help, you and other pronuba moths are the only ones that can pollinate the Joshua tree.

## Scruff:

You mean without Polly there would be no Joshua trees for you to live in?

## Who-Who:

That's exactly what I mean.

## Polly:

Boys, boys! I'm blushing.

## Scruff:

All I know is that without the Joshua tree, I'd have no place to sleep, no shade during the day and nothing to hide behind during a sand storm.

## Who-Who:

That's correct. This tree is one of the few that is able to survive in the hot, dry climate of the desert.

## Polly:

I am glad to help. Now, if you will excuse me, I have some pollinating to do.

Source: Reading A to Z

## Scruff:

And, if you will excuse me, I have some snoozin' to do. If you need me, I'll be under my bush.

## Who-Who:

I guess I'll go and straighten up my nest. It's been so hot I haven't done a thing all day.

## Scruff:

Just keep the noise down would you? Last night I hardly got a wink of sleep with all the banging and rattling that you were doing. By the way, what were you doing?

## Who-Who:

Just straightening up. A place for everything and everything in its place, that's my motto.

## Scruff:

Motto, smotto! Keep the noise down. If I didn't know better, I'd say you were afraid of the dark.

## Who-Who:

Don't be silly, I just prefer to stay busy.

## Narrator:

Scruff digs his hooves into the earth, trying to unearth a cool place to lie down. Dirt and dust fly into the air.

## Who-Who:

How do you expect me to keep things clean if you keep digging and sending up all this dust?

Polly:
Boys, that's enough squabbling. Get some rest.

## Narrator:

As Who-Who busies himself dusting and sweeping his nest in the arm of the Joshua tree, a rattlesnake slithers up towards Scruff.

## Scruff:

Who-Who, what's going on up there? Too much noise, too much noise, I can't possibly sleep.

## Zillard:

I could hear you guys arguing five sand dunes away.
What's the problem?

## Scruff:

I'll tell you what the problem is. Who-Who is afraid of the dark, and rather than sleep he cleans all night long and I can't get any shut-eye!

## Zillard:

An Owl afraid of the dark? You've got to be kidding!

## Scruff:

Hey, you try sleeping around here and we'll see who's kidding!

## Zillard:

Well, as I see it, the problem is really not a problem at all. I have an idea, come with me.

## Narrator:

Zillard and Scruff head out into the desert.

## Scruff:

First I can't get any sleep and now I have to take a walk.
What is this desert coming to?

## Narrator:

Zillard takes Scruff to an abandoned campsite.

## Zillard:

I can't believe how messy people are. They come to our desert and leave their trash all over the place-like it's a dump or something. But this time I think we might be able to use some of this stuff.

## Scruff:

How in the world is this trash going to help Who-Who not be afraid of the dark?

## Zillard:

Just bear with me.

## Narrator:

Before long Scruff and Zillard arrive back at the Joshua tree. Scruff is kicking something forward between his hooves.

## Who-Who:

Where have you two been? I've been so worried. Oh, by the way, Scruff, I picked up under your bush while you were gone.

## Scruff:

I have a feeling that your sleepless nights are over.

## Zillard:

That's right, here is the answer. . .

## Who-Who:

All I see is an old fruit jar between Scruff's hooves, what am I supposed to do with that old thing? And, ugh! It has flies in it!

## Zillard:

Take it up to your nest and you will see.

## Scruff:

Come on, Who-Who, just try it.

## Narrator:

Who-Who takes the jar in his talons and flies to his nest. The jar begins to glow.

## Who-Who:

What? Huh? What in the world is this?
Scruff:
Surprise! It's fireflies! They will keep your nest lit up all night long. Like a night-light.

## Zillard:

My work is done here. If you kids have any other problems, you know where to find me.

## Narrator:

As Zillard slithers back to his home under a rock, the sound of Scruff's snoring fills the night air. So, if you are afraid of the dark at night, remember Who-Who and the firefly light.

Source: Reading A to Z

Appendix V: Fluency


$>\quad$ Very little fluency
$>\quad$ All word-by-word reading with some long pauses between words
$>\quad$ Almost no recognition of syntax or phrasing (expressive interpretation)
Very little evidence of awareness of punctuation Perhaps a couple of two-word phrases, but generally disfluent Some word groupings awkward
> Mostly word-by-word reading, but some two-word phrasing and even a couple of three or four-word phrases (expressive interpretation)
$>\quad$ Evidence of syntactic awareness of syntax and punctuation, although not consistently so Rereading for problem solving may be present

3
$>$ A mixture of word-by-word reading and fluent, phrased reading (expressive interpretation)
$>\quad$ Evidence of attention to punctuation and syntax
$>$ Rereading for problem solving may be present
> Reads primarily in larger, meaningful phrases
> Fluent, phrased reading with a few word-by-word slowdowns for problem solving
Expressive interpretation is evident at places throughout the reading
Attention to punctuation and syntax
Rereading for problem solving may be present, but is generally fluent

Adapted from Fountas \& Pinnell: Guided Reading
Source: Cherry Carl

## Appendix W: Making Connections

Name: $\qquad$ Date: $\qquad$
Text Connection Sheet

Text-To-Self: What experience in your life do you think of when you read this book? Explain.
$\square$

Text-To-Text: What other book reminds you of this book? What do they have in common?


Text-To-World: what events in the real world remind you of this book? It could be something happening around you or something you heard on the news.


## Visualize it

Directions: When you use one of your senses during reading, draw a picture next to where it occurs in the book. After you are finished, tally up the number of how many times you used each sense.

Talk About it: Was there one you used more, one you used less? Why? How could you get better at the ones you are not using as much?

## Seeing



## Touching



Hearing

## Smelling



## Tasting



Appendix Y: Summarizing
The Fab 5
For a


## Nonliction Summary

What is the story about?

Where does the story take place?

Why do gou think the author wrote the story?

When does the story take place?

How... ? (How do animals hibernate? How do they make gum? How did lane Goodall help the chimps?)


# Fab Five to Writing a Fictional Summary 

Who? Who is the main character? Who are the other important characters?

> Wants What? The main character has to want something to make the story interesting. What does the main character want in the story?

But? But what happens? What gets in the way of the character getting what she or he wants? This is the problem of the story. It must eventually be resolved.

So? So what does the character do to try to solve the problem? What works for the character? What doesn't.

Then? And then what happens?
How is the problem solved?
How does the story end?
What does the character learn?

Appendix Z: What do you do when you don't know a word?

## Don't Know A Word?

What should you do?

1. Look at the pictures.
2. Try to sound out the word.
3. Look at the beginning letters.
4. Look at the ending letters.
5. Look for a smaller word in the word.
6. Skip the word and read the sentence to the end.
7. Try to guess! What word makes sense? Does your guess look like the word you see?
8. Use the words around it.
9. Go back and re-read. Does it sound right?
10. Put another word in its place.
11. Ask a friend or an adult.
12. Look in the dictionary.

Name: $\qquad$

# Text Coding 

When you use one of the reading strategies below, make the symbol in your book where it occurs. We will tally these up and chart the result.

## ? Ask a question

Reread the sentence

Stop and think about it

## Look for clues

Finger Tap

Making Connections
-text-to-self

## -text-to-text <br> -text-to-world


[^0]:    Research Design Note: Think carefully here again about whether or not your research design could negatively affect people with special vulnerabilities. For example, does your research design require so much concentration and/or computation that it might result in considerable stress for

