May the Force Be with You:

Information Literacy & the FINDS Research Model

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Goals & Objectives:

Students will develop and strengthen their Information Literacy Skills.
The successful mastery of and effective use of Information Literacy skills is an important higher-order and life-long learning process. Our students are 21st century learners, to be successful academically and in life they need to be effective users of information.

This project is an interdisciplinary tool to develop Information Literacy skills; it is based in Language Arts curriculum. This project also incorporates NETS-s standards, critical for our students' achievement. It can also be adapted to meet the needs of any curricula, as the research project can be adapted to any curriculum area focus.

Students will utilize the FINDS Research Process Model to define, determine, locate, access, organize, and evaluate their information needs. By engaging in Reference & Research, this project will take them through a hierarchy of processes to extract, analyze, synthesize, create, and evaluate information. By creating a unique digital project with information they have researched, students are authentically engaged in a crucial academic and life-long skill set.

Digital Storytelling is an effective tool for students to present their knowledge. It gives them a unique way to scaffold their newly researched information and to synthesize the information to make it their own. They develop technological skills and self-confidence as they create their original story. The project can be tailored to the student's needs, building independence in utilizing Information Literacy skills as the initial project and subsequent research needs are identified.

Our students are digital natives, 21st century learners; they are more authentically engaged with technology rich project based learning. This project allows them to master curriculum standards while expressing their creativity, work within a team-based learning environment, and achieve a level of intrinsic motivation as they create original digital projects.

Curriculum Standards:

FLORIDA LAFS, NETS & ESOL STRATEGIES:

The strands we are utilizing are from the content area we are studying/researching and LAFS as appropriate for the grade level:

Reading Standards for Informational Text
Cluster 1: Key Ideas and Details
Cluster 2: Craft & Structure
Cluster 3: Integration of Knowledge and Ideas
Cluster 4: Range of Reading and Level of Text Complexity

Writing Standards
Cluster 1: Text Types & Purposes
Cluster 2: Production & Distribution of Writing
Cluster 3: Research to Build and Present Knowledge
(Primary Information Literacy Strand)

Standards for Speaking & Listening
Cluster 1: Comprehension & Collaboration
Cluster 2: Presentation of Knowledge & Ideas

Language Standards
Cluster 3: Vocabulary Acquisition & Use

Science/Social Studies/Math depending on content curriculum for research.

ISTE NETS National NETS for Students (2004) ©ISTE NETS. All Rights Reserved (2005)
NETS for Students (2004) - Technology Foundation Standards and Performance Indicators for All Students
Grades 3- 5

1 BASIC OPERATIONS AND CONCEPTS
Standards:
Students demonstrate a sound understanding of the nature and operation of technology systems.
Students are proficient in the use of technology.
Performance Profiles: Prior to the completion of Grade 5, students will:
Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively.
Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.

2. SOCIAL, ETHICAL, AND HUMAN ISSUES
Standards:
Students practice responsible use of technology systems, information, and software.
Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
Performance Profiles: Prior to the completion of Grade 5, students will:
Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.

3 TECHNOLOGY PRODUCTIVITY TOOLS
Standards:
Students use technology tools to enhance learning, increase productivity, and promote creativity.
Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
Performance Profiles: Prior to the completion of Grade 5, students will:
Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing,

communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.

4 TECHNOLOGY COMMUNICATIONS TOOLS

Standards:

Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.

Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

Performance Profiles: Prior to the completion of Grade 5, students will:

Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.

Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom.

5 TECHNOLOGY RESEARCH TOOLS

Standards:

Students use technology to locate, evaluate, and collect information from a variety of sources.

Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

Performance Profiles: Prior to the completion of Grade 5, students will:

Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom.

Determine which technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems.

6 TECHNOLOGY PROBLEM-SOLVING AND DECISION-MAKING TOOLS

Performance Profiles: Prior to the completion of Grade 5, students will:

Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.

Broward ESOL Strategies / Marzano Instructional ESOL Strategies (2014)
Methodologies/ Approaches

A2 Heritage Language (L1) Support

B5 Pointing
B6 Repeating/Paraphrasing
B7 Gestures
B8 Show Examples & Non-Examples
B9 Demonstrations

C8 Oral Assessment
C9 Observation
C10 Context-Embedded Text

E1 Heterogeneous Grouping (Language/Content Readiness;
 Learner Profiles; Interests)
E8 Group Presentations/Projects

F6 Self-Monitor

G1 Activating and/or Building Prior Knowledge
G5 Ask Clarifying Questions
G6 Modeling
G8 Think Aloud
G23 Total Physical Response (TPR)
G24 Vary Complexity of Assignment
G25 Realia/Manipulatives

H1 Audio-Visual Applications
H4 Document Camera
H5 Interactive White Board
H8 Video/Film/CD/MP3
H9 Digital Simulations

I6 Graphs/Diagrams
I7 K-W-L

J3 Cultural Sharing
J8 Multicultural Resources

Course Outline/Lesson Plans:

Project Vision:
Setting the Stage:

Decide which curriculum area students will research; our first project was a Science research project on Force & Motion.

"We are going to research (desired research topic)"
"We are going to use the FINDS Research Process Model"
"How can we make it fun? Let's talk about how we can present it."
Brainstorm ideas, eliciting responses so any possibility other than a digital project sounds boring.

A diorama? That's so 1st grade.
A fact sheet? Done that.
A poster? Boooooring.

A movie? Hmmm, a movie????? You mean we get to make our own movies, using an iPad (or whichever platform you choose)???

Now that they are interested, we can define the project, discuss the steps involved, show a completed example, and review the rubric.

The steps and rubric can be adapted to meet learner needs.

The project can be adapted to accommodate any curricular focus and research need. One variation was collaboration with the Science content teacher researching predators. The students created a predator who could successfully hunt and catch Dr. Seuss' Lorax using researched facts on predators, food chains, and additional curriculum standards as appropriate for differing grade levels.

Project Building:

The steps outlined are for the "May the Force be with you" project. We built background knowledge utilizing engaging multimedia clips from the NFL. Students applied their new knowledge in multiple ways. First with an IWB activity for pushes and pulls, applying their knowledge utilizing dominoes then with a teacher created Comic Life graphic organizer to synthesize their knowledge.

Their end project was to synthesize these researched facts about force and motion to create an original movie explaining force and motion content curriculum, utilizing appropriate vocabulary including push, pull, inertia, unbalanced forces, and gravity.

This can be easily adapted with other research projects, and the complexity of the project can be adapted as well.

1. (Adapt for grade level/class ability) What is force? What is a push/pull? What is Newton's first Law of Motion? Define vocabulary/concepts write on board/IWB.

I pull a chair out and blow on it then ask students why the chair doesn't move?
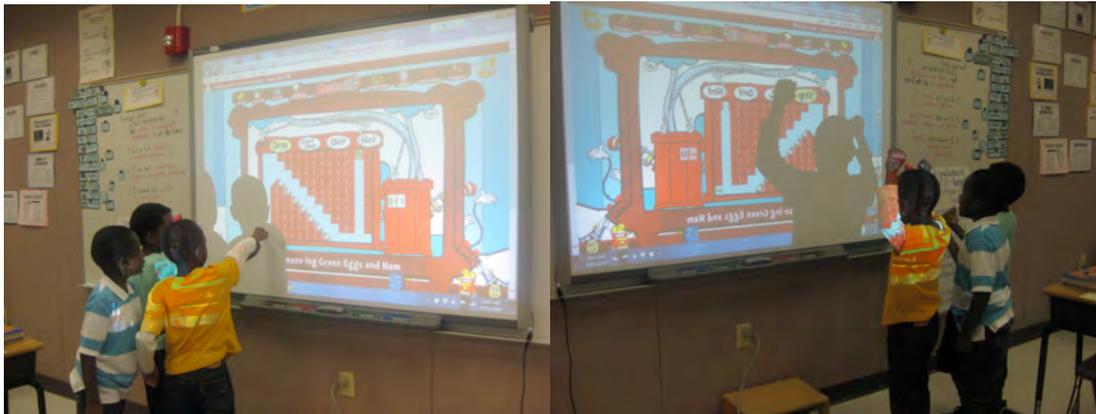
2. We then define Newton's Laws of Motion and discuss what an unbalanced force is. I introduce FINDS process and ensure students know we use non-fiction to research their facts.

2a. If students do not know how to access or use Destiny to find reliable resources, a mini lesson goes here. (You can contact me or your Media Specialist can help with this.)

3. Now we build some background knowledge/activate prior knowledge with engaging multimedia; the NFL has great videos on Newton's Laws of Motion (in resources section).
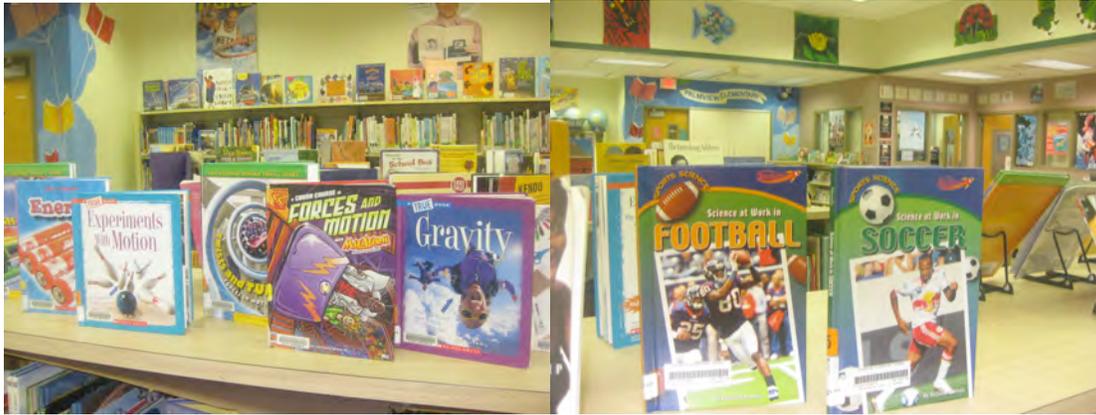
4. I create worksheets to allow students to work in teams and show their knowledge for this content.

5. I use an IWB activity to allow them to apply their knowledge from a non-fiction source (Dr. Seuss' Green Eggs & Ham push/pull activity). Students work in teams to solve problems.

6. I show a multimedia clip of Domino building to get them excited and engaged. We then apply our knowledge to build domino models.

7. Students film each other building, utilizing vocabulary and explaining push/pull; inertia, force & motion, Newton's Laws of Motion. Print resources are available for additional curriculum support if needed.

8.Throughout the project we are defining and utilizing the FINDS process; as I circulate and monitor the class and student learning we are discussing which part of the FINDS process in which we are now engaged.

9. Video content/pictures can be made into an iMovie, Windows Moviemaker movie, Animoto, Quicktime, as appropriate.
A discussion/review of digital citizenship & copyright and Broward County AUP would be appropriate here. Guidelines and format in attachments.

10. Student teams will be paired and they will assess the other team's movie using the rubric. Each team will then have an opportunity to edit their project.

11. One day can be set aside to showcase movies, evaluate end product and discuss other possible presentations of research. Utilize rubric for grading. End products can be shared on websites, morning announcements, at PTA & SAC meetings. Ensure that there are Media releases on file for any students in presented projects.

FINDS:

Students will develop and strengthen their Information Literacy Skills.

Alternate projects include "Predators: Lions and Tigers and Bears, Oh My!" and "Phases of the Moon".

The steps are the same for this or any other research project.

Focus on the information need.
1.Create excitement with multimedia clips, district digital and school print resources. (We create a focus question for our research here)
Investigate resources
2. Build background/activate previous knowledge.(We discuss reliable resources, print/digital fiction/non-fiction)
Trackstar can be created if multiple digital resources are desired for student research opportunities.
2a. Mini lesson on Destiny resources here if needed.
Note
3. Extracting info. from sources. Depending on grade level we discuss Digital Citizenship and Plagiarism. Monitor student mastery/comprehension using targeted teacher created Comic Life worksheets.
3a. Bibliography lesson here if required and appropriate.
Develop

4. Apply our knowledge from a non-fiction source to solve problems, utilizing an IWB activity, work as teams. Create a project to turn our information into shared knowledge.

4a. Mini lesson on audience, who is our audience? What is our purpose as an author? How should our project presentation meet their needs?

Score

5. Presentation and Evaluation. How do I know if I did a good job? Rubrics, audience feedback. How can I do a better job next time? Did I use and follow the FINDS process?

This project teaches Information Literacy skills that can be utilized across curricula and ability levels. It can utilize any technology or be effectively adapted with more, less, or without technology.

Presentation & Assessment:

Project Presentation:

One day set aside to showcase movies and review grading rubric. After peer-peer evaluation and re-editing has been finished, final teacher assessment.

Movies are shown using projector, standards for viewing are explained and modeled. (We are supportive; we speak positives before negatives, etc.)

Assessment of Process and Product:

Last day showcase also includes additional peer assessment of project. Students taking notes on what they have learned about the curriculum content through the presentations. Students will demonstrate knowledge of peer's researched topic by listing 5 (criteria set by teacher depending on class abilities) facts learned through presentation. This may require some teacher guidance:

"What concept did we just learn about? (Force and Motion? Predators?) What did we learn?" Questioning should now probe for information based on presented images/narration: Did we see a push or a pull? List 3 adaptations the predator has.

Final assessment may be peer review and/or teacher implemented rubric.

Sample Worksheets & Rubrics:

FINDS Student worksheets (3)

Student monitoring rubric trilingual version

Worksheets:
Inertia
Force & Motion
Phases of the Moon
Predators & prey
The Lorax

Storyboard Template

Copyright & Fair Use protocols

Bibliography worksheet

FINDS
A Research Process Model

Focus

I can ask questions to find information.
I can narrow or broaden my research topic.
I can work with others to find answers to my questions.

Investigation

I can find resources from different locations like the library and the Internet.
I know that resources can be organized in different ways (fiction/nonfiction, print/digital).
I know how to take care of different types of resources.

Note

I know the difference between literature and informational text.
I can make predictions about what I'm reading.
I know which facts about the research topic are useful.

Develop

I can draw conclusions from information to answer my questions.
I can share the information I've learned and experiences I've had with others.

Score

I can determine if the question has been answered.
I can share how I found information to answer the questions.
I can decide how well I did using the FINDS Research Process.

Grade K-Poster Adapted from FINDS: Florida Research Model

FINDS

Research Process Model

Focus on information need
- Narrow or broaden topic and write a thesis sentence.
- Determine how much information is needed.
- Define search terms.
- Outline a search plan and a timeline.

Investigate resources to search for answer
- Locate collections such as fiction, nonfiction, reference, biography, nonprint, and e-resources.
- Apply evaluative criteria to select the best resources to answer the search question.
- Demonstrate an understanding of how information is organized and located.
- Exhibit responsible care and use of materials, e-resources, equipment, and facilities.

Note and evaluate facts and ideas to answer the question
- Read, evaluate, and select information to answer search need.
- Take notes and record data required for citations.
- Analyze information gathered and compare with research need.
- Organize notes for clarity, coherence, and emphasis.

Develop information into knowledge for presentation
- Select a presentation format appropriate for the topic, audience, purpose, content, and technology available.
- Analyze and synthesize collected information.
- Use resources and technology to create and present a quality product.
- Demonstrate effective interpersonal communication skills to share ideas and information with others.

Score presentation and search process
- Apply or develop evaluative criteria for information problem or product.
- Reflect on the search process, noting strengths and weaknesses.
- Make recommendations for ways to improve search strategies.

12/05

FINDS

Research Process Model

Focus on information need
The student will:
1. Determine the information problem.
2. Develop a search plan.
3. Understand and use search techniques and terminology.

Investigate resources to search for answer
The student will:
1. Understand the structure and organization of information resources.
2. Develop and apply personal and evaluative criteria for selecting relevant resources.
3. Access and use appropriate print, nonprint, and electronic resources to gather information.
4. Respect the rights of others to equitable access to information.

Note and evaluate facts and ideas to answer the question
The student will:
1. Interpret and analyze information to answer search need.
2. Compile and organize information to answer the search question, recording bibliographic data.
3. Understand the concepts of intellectual property rights and intellectual freedom.

Develop information into knowledge for presentation
The student will:
1. Understand the strategies necessary to produce a project.
2. Select and use a variety of appropriate media equipment and accessories.
3. Organize information and ideas to effectvely communicate them to others.
4. Present information and ideas, including a bibliography.

Score presentation and search process
The student will:
1. Evaluate outcome compared to criteria defined for information problem.
2. Analyze and evaluate the search process.
3. Make recommendations for improving search process.

12/05

I am an expert! | Yo soy un experto! | Mwen se espesyalis!

I understand. | Yo entiendo. | Mwen konprann.

I need help. | Yo necesito ayuda. | Mwen bezwen èd.

I do not understand. | Yo no entiendo. | Mwen pa konprann.

INERTIA
Your truck has brakes...the massive hunk of stone doesn't

EXPLAIN THE CAPTION TO THIS PICTURE:

DRAW A PICTURE AND WRITE A CAPTION USING A DIFFERENT OBJECT WITH A FORCE ACTING UPON IT.

NEWTON'S FIRST LAW OF MOTION IS ALSO CALLED THE LAW OF INERTIA. IT STATES THAT AN OBJECT IN MOTION STAYS IN MOTION UNTIL AN UNBALANCED FORCE ACTS UPON IT. IT ALSO STATES THAT AN OBJECT AT REST STAYS AT REST UNTIL AN UNBALANCED FORCE ACTS UPON IT.

WHAT DOES UNBALANCED FORCE MEAN?

NAME:

FORCE & MOTION

NEWTON'S FIRST LAW OF MOTION ALSO CALLED THE LAW OF INERTIA STATES AN OBJECT IN MOTION STAYS IN MOTION UNTIL AND UNBALANCED FORCE ACTS UPON IT. IT ALSO STATES THAT AN OBJECT AT REST STAYS AT REST UNTIL AN UNBALANCED FORCE ACTS UPON IT.

WHAT DOES UNBALANCED FORCE MEAN?

DRAW A PICTURE AND WRITE A CAPTION USING A DIFFERENT OBJECT WITH A FORCE ACTING UPON IT.

NAME:

NAME:

THE MOON

THE MOON REVOLVES AROUND THE EARTH AND DOES NOT ALWAYS LOOK THE SAME TO US ON EARTH. WE OBSERVE, OR SEE, DIFFERENT PHASES OF THE MOON AT DIFFERENT TIMES DURING THE MONTH.

WHAT IS THE DIFFERENCE BETWEEN ROTATION AND REVOLUTION?

WHY DO WE SEE DIFFERENT PHASES OF THE MOON?

DRAW A PICTURE OF THE SUN, EARTH & MOON WHEN WE SEE A FULL MOON.

DRAW A PICTURE OF THE SUN, EARTH & MOON WHEN WE SEE A NEW MOON.

DOES THE MOON CREATE IT'S OWN LIGHT?

HOW LONG DOES IT TAKE FOR THE MOON TO REVOLVE AROUND THE EARTH ONE TIME?

HOW LONG DOES IT TAKE FOR THE EARTH TO ROTATE ON IT'S AXIS ONE TIME?

HOW LONG DOES IT TAKE THE MOON AND THE EARTH TO REVOLVE AROUND THE SUN ONE TIME?

HOW MANY COMPLETE REVOLUTIONS HAS IT MADE SINCE YOU WERE BORN?

NAME/GROUP MEMBERS:

Predators & Prey

A PREDATOR IS AN ANIMAL THAT HUNTS AND EATS OTHER ANIMALS FOR FOOD. THE ANIMAL THAT IS HUNTED AND EATEN IS CALLED PREY.

WHAT IS THE NAME OF YOUR ANIMAL:

IS IT A PREDATOR OR A PREY ANIMAL?

WHAT EVIDENCE DO YOU HAVE FOR THIS ANSWER?

AN ADAPTATION IS SOMETHING ABOUT AN ANIMAL'S BODY THAT MAKES IT SUCCESSFUL IN ITS HABITAT. AN EXAMPLE IS A POLAR BEAR WHO LIVES IN THE TUNDRA WHERE THERE IS SNOW AND ICE. ONE ADAPTATION A POLAR BEAR HAS IS WHITE FUR WHICH ALLOWS IT TO SNEAK UP ON ITS PREY AND BE A SUCCESSFUL PREDATOR.

WHAT IS YOUR ANIMAL'S HABITAT?

DOES YOUR ANIMAL HAVE ANY ADAPTATIONS TO MAKE IT A SUCCESSFUL PREDATOR IN ITS HABITAT? OR IF IT IS A PREY ANIMAL, HOW DOES IT KEEP FROM BEING CAUGHT?

WHAT WOULD HAPPEN TO A POLAR BEAR IF IT WAS PURPLE? EXPLAIN YOUR ANSWER.

WHAT WAS YOUR INFORMATION SOURCE FOR YOUR FACTS? WHERE DID YOU FIND YOUR EVIDENCE?

NAME/GROUP MEMBERS:

THE LORAX PREDATOR

A PREDATOR IS AN ANIMAL THAT HUNTS AND EATS OTHER ANIMALS FOR FOOD. THE ANIMAL THAT IS HUNTED AND EATEN IS CALLED PREY.

AN ADAPTATION IS SOMETHING ABOUT AN ANIMAL'S BODY THAT MAKES IT SUCCESSFUL IN ITS HABITAT. AN EXAMPLE IS A POLAR BEAR WHO LIVES IN THE TUNDRA WHERE THERE IS SNOW AND ICE. ONE ADAPTATION A POLAR BEAR HAS IS WHITE FUR WHICH ALLOWS IT TO SNEAK UP ON ITS PREY AND BE A SUCCESSFUL PREDATOR.

WHAT ADAPTATIONS DO PREDATORS HAVE?

THE LORAX IS A FICTIONAL CHARACTER WHO LIVES IN A VERY SPECIFIC HABITAT. CREATE A PREDATOR WHO COULD HUNT AND CATCH THE LORAX. THINK ABOUT THE HABITAT AND THE LORAX. YOU CAN COMBINE PREDATORS YOU ALREADY KNOW ABOUT (A CHAMELEON/ MONKEY/LION) OR CREATE ADAPTATIONS (BREATHES FIRE).

DRAW AND DESCRIBE YOUR PREDATOR; MAKE SURE YOU LABEL AT LEAST 3 ADAPTATIONS.

WHAT WAS YOUR INFORMATION SOURCE FOR YOUR FACTS? WHERE DID YOU FIND YOUR EVIDENCE? WAS IT A BOOK? A MOVIE? AN EXPERT? A WEBSITE?

WRITE THE LIST HERE:

Research Digital Presentation Template

Title of Project _____
Name/Team Members _____

Audio Narration/Music	Video Image	Notes Facts/Sequence/Vocabulary

COPYRIGHT GUIDELINES FOR MULTIMEDIA PROJECTS

1. Students may use portions of lawfully acquired copyrighted works in their academic
multimedia projects, with proper credit and citations. They may retain them in personal portfolios as examples of their academic work.

2. The opening screen must include a statement that their presentation has been prepared under fair use exemption of the U.S. Copyright Law.

3. Students need not write for permission if their presentation falls within the specific
multimedia fair use guidelines, which are as follows:

Text
• Up to 10% of a copyrighted work or 1000 words, whichever is less
• Poems
– Entire poem if less than 250 words
– 250 words or less if longer poem
– No more than 5 poems (or excerpts) of different poets, from an anthology
– Only 3 poems (or excerpts) per poet

Motion Media
• Up to 10% of a copyrighted work or 3 minutes, whichever is less
• Clip cannot be altered in any way

Illustrations
• A photograph or illustration may be used in its entirety.
• No more than 5 images of an artist's or photographer's work
• When using a collection, no more than 10% or no more than 15 images, whichever is less

Music
• Up to 10% of a musical composition, but no more than 30 seconds
• Up to 10% of a sound recording, but no more than 30 seconds
• No changes can be made to the work.

Internet
• Internet resources often combine both copyrighted and public domain sites. Use care in downloading any sites for use in multimedia presentations.

Multimedia Presentations Citations
• Students must credit sources, giving full bibliographic information when available.
• Students must display the copyright notice and copyright ownership information if this is shown in the original source.

BIBLIOGRAPHY

The definition of a bibliography is:
A list of resources at the end of a (research) project. Each item on the list is called a citation.

Why do you need a bibliography?????

1. To let the reader (or viewer) of your project know you used facts and reliable resources.

2. To follow the copyright law and give credit to the people who created the original work.

AS YOU RESEARCH USING RELIABLE RESOURCES YOU NEED TO WRITE DOWN WHERE YOU FIND YOUR EVIDENCE AND FACTS. YOU CAN USE BOOKS, MOVIES, WEBSITES OR EXPERT INTERVIEWS. THIS LIST WILL BECOME YOUR BIBLIOGRAPHY, OR REFERENCES LIST.

AN EXAMPLE:

SHARK RESEARCH PROJECT

BIBLIOGRAPHY

1. "Leopard shark." *World Book Kids*. World Book, 2014. Web. 5 May 2014 .

2. Zollman, Pam. *A Shark Pup Grows up*. New York: Children's, 2005. Print.

3. Expert, Shark. "Miami Zoo." Personal interview. 01 May 2014.

TURN OVER TO WRITE YOUR RESEARCH REFERENCES FOR YOUR BIBLIOGRAPHY.
USE WWW.EASYBIB.COM FOR FORMATTING YOUR CITATIONS.

WHAT TYPE OF RESOURCES DID THIS STUDENT USE?
FOR EACH RESOURCE FIGURE OUT & WRITE THE TYPE OF RESOURCE, WHEN THEY USED IT AND WHERE DID THEY GO TO FIND IT.

RESOURCE 1:

RESOURCE 2:

RESOURCE 3:

Resource List:

General project resources:
Comic Life (Atomic Learning tutorials available)
Animoto
iMovie
Windows Moviemaker
Rubrics & Trackstars: 4teachers.org
Classes also available for iSuite & Smartboard through ETS.
Youtube protocol and passwords to access.
Netflix or Amazon account for streaming.

iPad, Kindle Fire or other tablet capable of recording and running apps.
Flip or other video recorder
USB Storage Key
Construction paper
Colored pencils, crayons & markers

FINDS Process Resources:

FINDS docs
Bibliography worksheet

Specific Content curriculum unit resources:

Force & Motion
NFL Laws of Motion clips
http://nbclearn.com/portal/site/learn/science-of-nfl-football

Inertia worksheet

Dr. Seuss website - Green Eggs and Ham IWB Force & Motion game
http://www.seussville.com/#/games

Non fiction informational books about Force & Motion and Fictional to compare and contrast.

Domino application
Insane Domino Tricks:
https://www.youtube.com/watch?v=ARM42-eorzE&index=35&list=PLOPe2lIYA7sC9IyueAO1EFogFuvklckTx

Domino sets: Basic set available on Amazon
Learning Resources Doublesix Dominoes In Bucket   24.42

http://www.amazon.com/gp/product/B000F8R4TC/ref=oh_aui_detailpage_o06_s00?ie=UTF8&psc=1

Moon Phases
Video clips

http://science.howstuffworks.com/dark-side-of-moon2.htm

Moon phases worksheet

Non fiction informational books about the Moon and Fictional to compare and contrast.

Predators

National Geographic Jaguar & Caiman
http://video.nationalgeographic.com/video/news/jaguar-attacks-crocodile?gc=%2Fvideo%2Fanimals

Non fiction Informational Books about Predators and Fictional to compare and contrast.

National Geographic Kids website

http://kids.nationalgeographic.com/animals.html

Disneynature Predator and Prey Classroom Edition [Interactive DVD] (2009)   19.99 Amazon

Investigators Theme Pack – Predators 9780545178082 Scholastic 249.99

More info (including additional and alternate curriculum focuses):
http://teacher.scholastic.com/products/classroombooks/investigators.htm

Predators & Prey worksheet

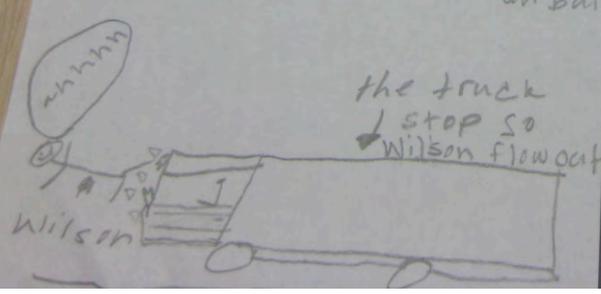Lorax movie DVD 9.49 Amazon
Lorax worksheet

Student Work Samples:

INERTIA

Your truck has brakes...the massive hunk of stone doesn't

EXPLAIN THE CAPTION TO THIS PICTURE:

The truck has brakes but the stone doesn't so the truck move at the same time as the stone so when the truck stop the stone keep moving until it has been stop by an unbalance force.

DRAW A PICTURE AND WRITE A CAPTION USING A DIFFERENT OBJECT WITH A FORCE ACTING UPON IT.

the truck stop so Wilson flow out

Wilson

NEWTON'S FIRST LAW OF MOTION ALSO CALLED THE LAW OF INERTIA STATES AN OBJECT IN MOTION STAYS IN MOTION UNTIL AND UNBALANCED FORCE ACTS UPON IT. IT ALSO STATES THAT AN OBJECT AT REST STAYS AT REST UNTIL AN UNBALANCED FORCE ACTS UPON IT.

WHAT DOES UNBALANCED FORCE MEAN? an unbalanced force is when two force are in motion and then an unbalance force come and stop a moving force.
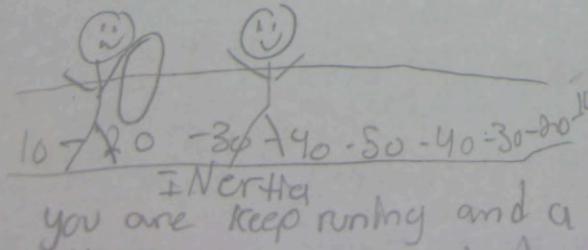
INERTIA

Your truck has brakes...the massive hunk of stone doesn't

EXPLAIN THE CAPTION TO THIS PICTURE:

The truck and the stone are going the same speed. Then the trucks come to an end. The INertia which is the stone is moving needs an unbalance force stops it, which is the front of the truck.

DRAW A PICTURE AND WRITE A CAPTION USING A DIFFERENT OBJECT WITH A FORCE ACTING UPON IT.

10 70 0 -30 -40 -50 -40 -30 -20 -10

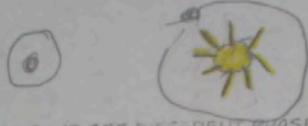INertia

you are keep runing and a

NEWTON'S FIRST LAW OF MOTION ALSO CALLED THE LAW OF INERTIA STATES AN OBJECT IN MOTION STAYS IN MOTION UNTIL AND UNBALANCED FORCE ACTS UPON IT. IT ALSO STATES THAT AN OBJECT AT REST STAYS AT REST UNTIL AN UNBALANCED FORCE ACTS UPON IT.

WHAT DOES UNBALANCED FORCE MEAN? An UnBalanced force is a force that is not equal to the other force.

NAME

THE SAME TO US ON EARTH...
OF THE MOON AT DIFFERENT TIMES DURING THE MONTH.

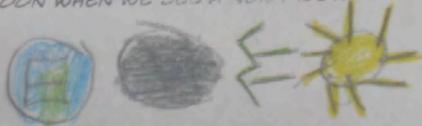WHAT IS THE DIFFERENCE BETWEEN
ROTATION AND REVOLUTION?

WHY DO WE SEE DIFFERENT PHASES OF
THE MOON?

Because its in
an different
position

DRAW A PICTURE OF THE SUN, EARTH &
MOON WHEN WE SEE A FULL MOON.

DRAW A PICTURE OF THE SUN, EARTH &
MOON WHEN WE SEE A NEW MOON.

DOES THE MOON CREATE IT'S OWN
LIGHT?

No

HOW LONG DOES IT TAKE FOR THE
MOON TO REVOLVE AROUND THE
EARTH ONE TIME?

1 month

HOW LONG DOES IT TAKE FOR THE
EARTH TO ROTATE ON IT'S AXIS ONE
TIME?

1 day

HOW LONG DOES IT TAKE THE MOON
AND THE EARTH TO REVOLVE
AROUND THE SUN ONE TIME?

1 year

HOW MANY COMPLETE REVOLUTIONS
HAS IT MADE SINCE YOU WERE
BORN?

10

WHAT IS THE DIFFERENCE BETWEEN ROTATION AND REVOLUTION?

WHY DO WE SEE DIFFERENT PHASES OF THE MOON?

We see diffrent phrases, because at moves in a diffrent place.

DRAW A PICTURE OF THE SUN, EARTH & MOON WHEN WE SEE A FULL MOON.

moon   earth   sun

DRAW A PICTURE OF THE SUN, EARTH & MOON WHEN WE SEE A NEW MOON.

earth   moon   sun

DOES THE MOON CREATE IT'S OWN LIGHT?

No

HOW LONG DOES IT TAKE FOR THE MOON TO REVOLVE AROUND THE EARTH ONE TIME?

1 month

HOW LONG DOES IT TAKE FOR THE EARTH TO ROTATE ON IT'S AXIS ONE TIME?

1 day

HOW LONG DOES IT TAKE THE MOON AND THE EARTH TO REVOLVE AROUND THE SUN ONE TIME?

1 year

HOW MANY COMPLETE REVOLUTIONS HAS IT MADE SINCE YOU WERE BORN?

7

PREDATORS & PREY

A PREDATOR IS AN ANIMAL THAT HUNTS AND EATS OTHER ANIMALS FOR FOOD. THE ANIMAL THAT IS HUNTED AND EATEN IS CALLED PREY.

WHAT IS THE NAME OF YOUR ANIMAL:
Shark.

IS IT A PREDATOR OR A PREY ANIMAL?
Predator.

WHAT EVIDENCE DO YOU HAVE FOR THIS ANSWER? It eats other small animals

WHAT IS YOUR ANIMAL'S HABITAT?
Bottom of the ocean.

DOES YOUR ANIMAL HAVE ANY ADAPTATIONS TO MAKE IT A SUCCESSFUL PREDATOR IN ITS HABITAT? OR IF IT IS A PREY ANIMAL HOW DOES IT KEEP FROM BEING CAUGHT?
Sense of smell. Vision. Electrical field

WHAT WOULD HAPPEN TO A POLAR BEAR IF IT WAS PURPLE? EXPLAIN YOUR ANSWER.
he wouldn't be able to catch it's prey and he would die of hunger

AN ADAPTATION IS SOMETHING ABOUT AN ANIMAL'S BODY THAT MAKES IT SUCCESSFUL IN ITS HABITAT. AN EXAMPLE IS A POLAR BEAR WHO LIVES IN THE TUNDRA WHERE THERE IS SNOW AND ICE. ONE ADAPTATION A POLAR BEAR HAS IS WHITE FUR WHICH ALLOWS IT TO SNEAK UP ON ITS PREY AND BE A SUCCESSFUL PREDATOR.

WHAT WAS YOUR INFORMATION SOURCE FOR YOUR ANIMAL? WHERE DID YOU FIND YOUR

NAME/GROUP MEMBERS: Shaki Allison

PREDATORS & PREY

A PREDATOR IS AN ANIMAL THAT HUNTS AND EATS OTHER ANIMALS FOR FOOD. THE ANIMAL THAT IS HUNTED AND EATEN IS CALLED PREY.

WHAT IS THE NAME OF YOUR ANIMAL:
cheetah

IS IT A PREDATOR OR A PREY ANIMAL?
predator

WHAT EVIDENCE DO YOU HAVE FOR THIS ANSWER? Uses its speed and stereoscopic vision to hunt

WHAT IS YOUR ANIMAL'S HABITAT?
grasslands

DOES YOUR ANIMAL HAVE ANY ADAPTATIONS TO MAKE IT A SUCCESSFUL PREDATOR IN ITS HABITAT? OR IF IT IS A PREY ANIMAL HOW DOES IT KEEP FROM BEING CAUGHT?
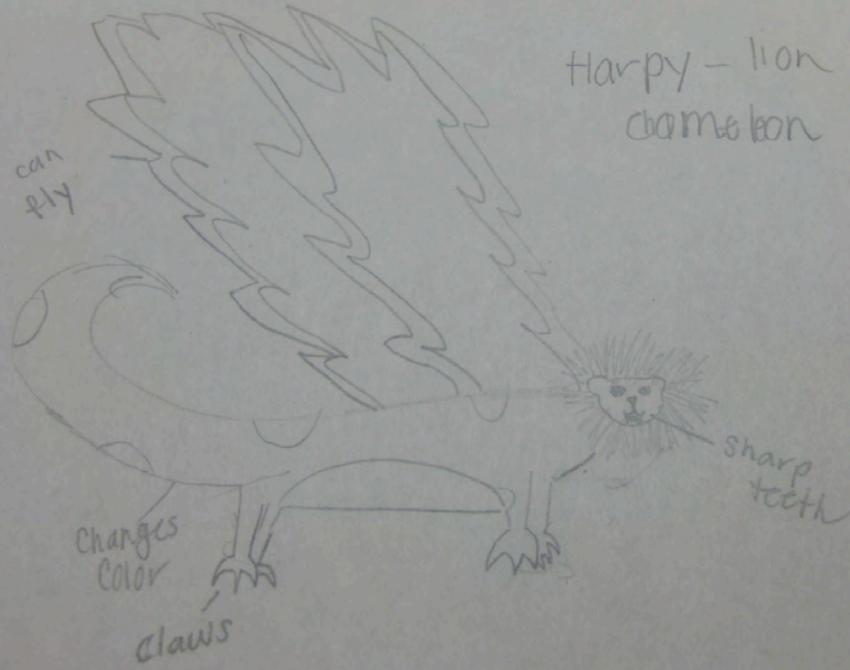The cheetah has black around it's eyes so sun rays wont it get in its eyes so the black absorbs sun rays.

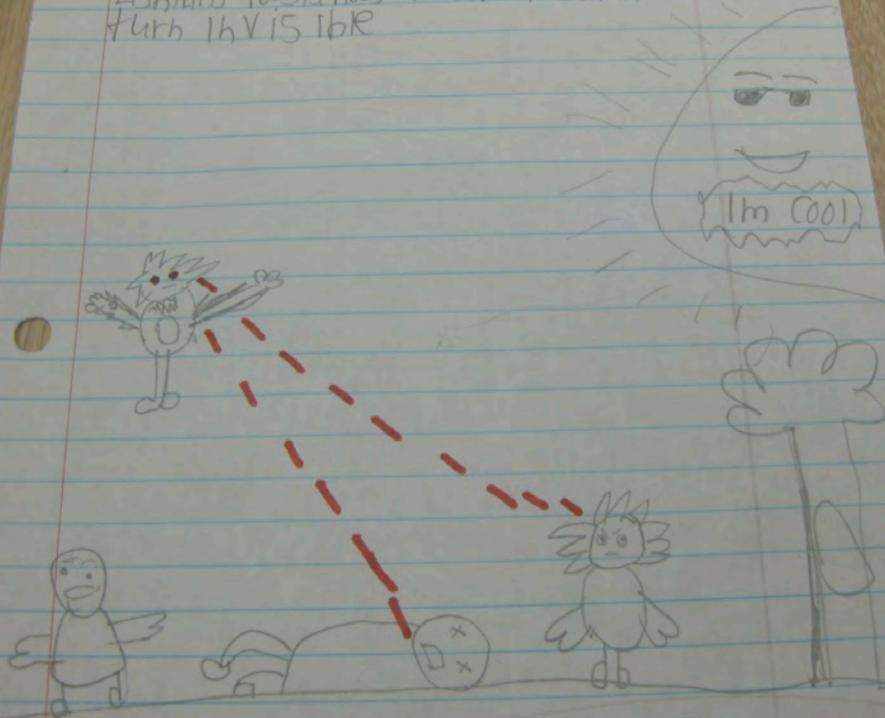WHAT WOULD HAPPEN TO A POLAR BEAR IF IT WAS PURPLE? EXPLAIN YOUR ANSWER.
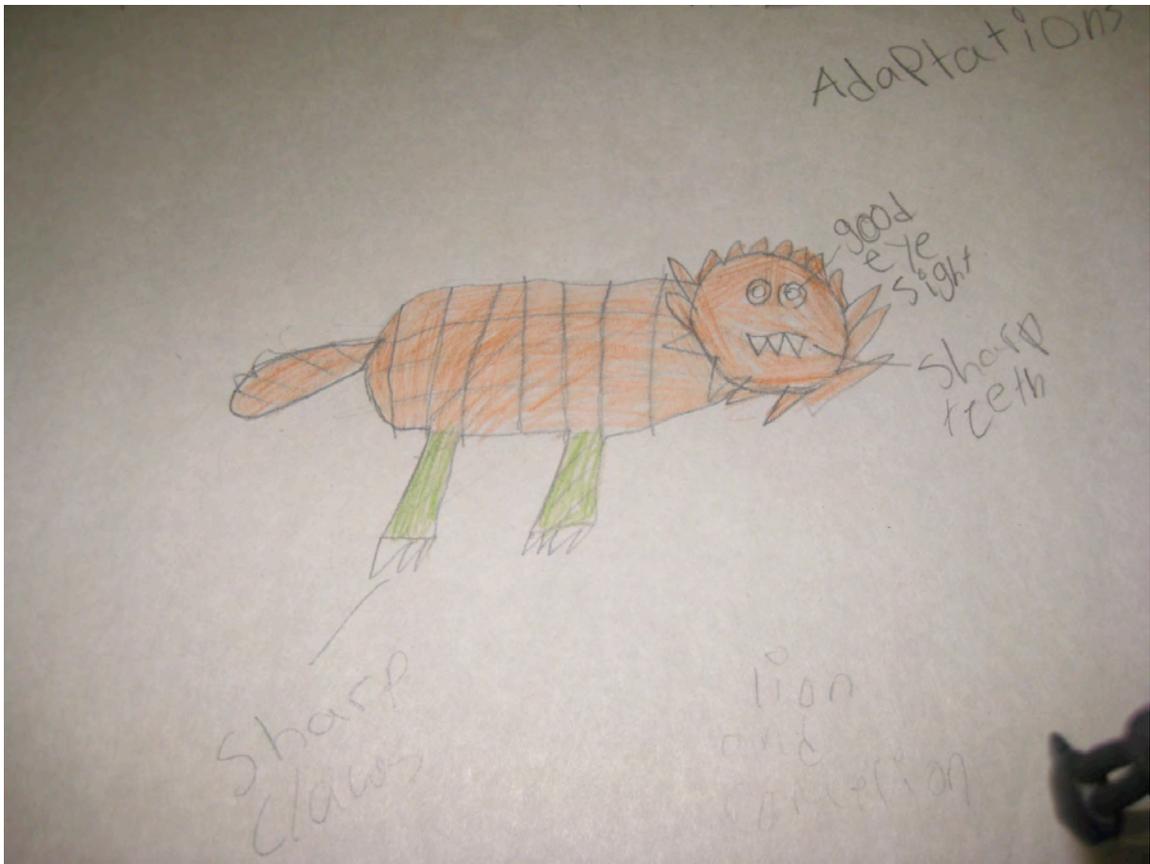it would be difficult to catch thier prey.

AN ADAPTATION IS SOMETHING ABOUT AN ANIMAL'S BODY THAT MAKES IT SUCCESSFUL IN ITS HABITAT. AN EXAMPLE IS A POLAR BEAR WHO LIVES IN THE TUNDRA WHERE THERE IS SNOW AND ICE. ONE ADAPTATION A POLAR BEAR HAS IS WHITE FUR WHICH ALLOWS IT TO SNEAK UP ON ITS PREY AND BE A

LORAX Predator

Harpy – lion
chameleon

can fly

changes color

claws

sharp teeth

A lion that spits fire, fly, runs lightning fast, has laser eyes, and turn invisible

Im cool

Student Assessment Rubric:

This rubric includes all the parameters for the project and should be adjusted for your student's level/ability/final project.

Research Report: FINDS process

Student Name:
Teacher Name:

Category	4	3	2	1
Quality of Information	Information clearly relates to the main topic. It includes several supporting details and/or examples.	Information clearly relates to the main topic. It provides 1-2 supporting details and/or examples.	Information clearly relates to the main topic. No details and/or examples are given.	Information has little or nothing to do with the main topic.
Graphic Organizer	Graphic organizer or outline has been completed and shows clear, logical sequencing with sound and video/image support.	Graphic organizer or outline has been completed and shows clear, logical sequencing with sound and video/image support.	Graphic organizer or outline has been started and includes some sequencing with sound and video/image support.	Graphic organizer or outline has not been attempted.
Internet Use	Successfully uses Destiny and school or district suggested internet links to find information and navigates within these sites easily without assistance.	Usually able to use Destiny and school or district suggested internet links to find information and navigates within these sites easily without assistance.	Occasionally able to use Destiny and school or district suggested internet links to find information and navigates within these sites easily without assistance.	Needs assistance or supervision to use Destiny and school or district suggested internet links and/or to navigate within these sites.

Sources	All sources (information and graphics) are accurately documented. There are at least 4 sources, print and digital. The sources are all informational (non-fiction).	All sources (information and graphics) are accurately documented. There are at least 2 sources, print and digital. The sources are all informational (non-fiction).	All sources (information and graphics) are accurately documented. There are at least 4 sources, print and digital. Most of the sources are informational (nonfiction).	There are zero, or it is unclear if there are sources, print or digital. It is unclear if the sources are informational (nonfiction).
Diagrams & Illustrations	Diagrams, graphics or illustrations are neat, accurate and add to the reader's understanding of the topic.	Diagrams, graphics or illustrations are accurate and add to the reader's understanding of the topic.	Diagrams, graphics and illustrations are neat and accurate and sometimes add to the reader's understanding of the topic.	Diagrams, graphics and illustrations are not accurate OR do not add to the reader's understanding of the topic.
Author's Purpose	Purpose is clearly to inform, facts and not opinions have been presented.	Purpose is mostly to inform, facts and some opinions have been presented.	Purpose is unclear, facts and mostly opinions have been presented.	Purpose is unclear, opinions have been presented.
Audience Needs	Audience needs have been assessed. Presentation is appropriate for desired audience level, vocabulary is defined if applicable.	Audience needs have been assessed. Presentation is appropriate for desired audience level, vocabulary is not defined, or inappropriate for audience if applicable.	Audience needs have been assessed. Presentation is appropriate for desired audience level, but vocabulary is not defined if applicable.	Audience needs have not been assessed. Presentation is not appropriate for desired audience level, vocabulary has not been defined.
FINDS Process	FINDS process has been used and followed. Student understands and can explain why the process is important.	Most of the FINDS process has been used and followed. Student understands and can explain why most of the process is important.	Some of the FINDS process has been used and followed. Student understands and can explain why some of the process is important.	FINDS process has not been used nor followed. Student does not understand why the process is important.