

netTrekker d.i. Best Practices

Elementary:

- **Kindergarten:** Keyword search on “number sense.” Then click on Readability Level of 1. Launch *BBC Education: How Many Are Green?* for a great exercise for students to count and recognize colors. Site has audio.
- **Kindergarten:** Keyword search on “animals.” Then click on the Learning Games tab. *I Spy: An Animal Guessing Game* can be used to test student’s knowledge of different animals.
- **Kindergarten:** Find both interactive exercises and lesson plans to teach “onset and rime” by drilling down: Language Arts>Reading and Visual Literacy>Pre-reading>Phonemic Awareness>Onset and Rime.
- **Kindergarten:** Keyword search on “weather.” Then click on the Learning Exercises tab. Direct your students to *Sesame Street Workshop: Elmo’s Weather World* for a fun exercise on dressing for the correct weather.
- **Kindergarten Phonics:** Keyword search for “phonics.” *Sadlier-Oxford: Phonics and Word Study* is an excellent site for Kindergarten centers. *Alphabet Zoo* has the student match upper with lower case letters. *Work Drop* has students choose the correct high frequency word out of a word bank to complete a sentence. There are three *Memory* activities for them to play. There are also sections for Grades 1-2, 3-4, and 5-6. Each section has several choices of grade-appropriate activities that are engaging and educational. Extremely helpful for students who need more practice with phonics.
- **K-4 Computer Lab:** Under the Elementary tab, search “Internet safety.” Use Narrow Your Subject feature to click on Technology, then Internet, then Internet Safety and Security. Click on the Online Safety for Children and Teens, select *NetSmartz Workshop*. Select Educators and choose the appropriate grade level. Choose the Activity Cards, download the videos and begin your Internet Safety Lesson. This is a comprehensive site for teaching the importance of the protection of kids and teens on the internet. Great for Parents at home as well.
- **K-5 Phonics/ELL:** From the Elementary English Learners tab, enter keyword “phonics” and click Learning Exercises tab. *Fonetiks: Phonics Practice* has lots of pages for different letter combinations. Student will practice listening and reading in English.
- **1st Grade:** Keyword search “simple machines.” Then direct your students to *Edheads: Simple Machines* to perform a variety of learning exercises.
- **1-5 Physical Education:** Keyword search “jumping rope.” You will find sites with lesson plans, pictures and videos for your students.
- **1st Grade Math:** Keyword search for “place value.” Sort by Learning Games. *ToonUniversity.com: Place Value to Hundred Thousands* is a great tool for younger students struggling with the concept.
- **2nd Grade:** Theme search can be used for an entire grade level unit. The sea can be used for a Theme search. Narrow Your Subject results are available in Science, Social Studies, Language Arts, English Language Learners, Arts, Math, Health and Physical Education, Philosophy and Religion, Vocational Education, Foreign Language, and Technology.
- **2nd Grade:** Theme search for “President’s Day.” *PBS Kids: President for a Day!*, found in Social Studies, and *Univ. of VA: Good Stories for Great Holidays*, found in Language Arts, are both good sites to use.
- **3rd Grade Math:** Keyword “multiplication facts.” Click on Learning Games and find *Quick Flash Multiplication Facts Practice*. Students pick the level of difficulty and try to beat the timer for each fact. Students never know which fact will light up next.

- **3rd Grade Language Arts:** I found some really great worksheets when I entered keyword "suffixes" and used the Refinement Tabs. I found a memory game for my students to play on the computer, and I let them play it during morning work. That gave them a little introduction for the lesson later that day.
- **3rd Grade Timeline:** I used the timeline feature to build a timeline for Martin Luther King, Jr. My students really liked how easy it was to follow his life through the timeline. Then we created timelines of our own lives!
- **3rd-5th Math:** Keyword search "multiplication." *Batter's Up Multiplication Baseball* is a great site for practice of multiplication facts. Boys into baseball may especially like it. Student must choose either single, double, or homerun. Single are basic facts. Doubles are a two-digit number times a single-digit. Homeruns are a double-digit number times another double-digit number. The graphics are nice and it is more than plain rote memorization. This site would make a great center for multiplication practice.
- **3rd-4th Research:** Our third and fourth graders are beginning to work on Social Studies Fair Projects. For this they need access to primary sources. We are searching in netTekker d.i. for these sources. It has helped the students differentiate between primary and secondary sources.
- **3rd Grade Art:** Keyword search for sites on "art in world cultures." Then click on Readability Level 2. *World Museum Liverpool: Knowledge for Your Noggin* can be used for a supplemental art activity. To enhance any student's learning experience, especially those who struggle with reading, open the Read Aloud feature before clicking into this site.
- **4th Grade Math:** Keyword search for "coordinate plane." Then click on the Learning Games tab. *BBCi: Planet Hop Game* can be used for a fun activity in class or can be suggested for students to play at home for homework.
- **4th Grade Math:** Keyword search "multiplication." Click tab for Learning Games, then scroll down to *Quia-Brain Buster*. This is like *Who Wants to be a Millionaire*, only with multiplication problems. This would make a great center.
- **4th Grade Social Studies:** Keyword search "Declaration of Independence." Go to the *Famous Moments in American History* site to view still photos and hear an explanation of how the Declaration of Independence was written. Students view the video twice and then tell the story in their own words.
- **4th Grade Social Studies:** Keyword search "colonial Life." Go to PBS Colonial House (<http://www.pbs.org/wnet/colonialhouse/>). Using your AverMedia cable, you can display this entire website on the TV to your entire class. This website contains everything from the happenings in North America in the 17th century, to "Dress Me Up" (what kind of clothing did the colonists wear?), to video voyages...and the list goes on. This is a great interactive way to teach each child.
- **4th Grade Physical Science:** Keyword search "conductors." Go to *Circuits and Conductors*. A fantastic interactive activity to help illustrate the difference between conductors and insulators. A brief quiz is available after completion of the activity. This is a great website to use with your students if you have the AV cables that will display it on the computer. This is also a website that each of them can visit at home or while at computer class.
- **4th-5th Geography (United States):** Trying to learn the locations of the 50 states can be difficult and monotonous. Try this website to lessen the boredom. Keyword search "United States." Click on link for *FedStats: Mapstats for Kids*. On the game "Paint the Map," students play a game that has them finding the state and clicking on it. When you choose easy, the states have the names on them. This is great to start out learning the states. The difficult version is without the state names listed.

- **4th Grade Science:** Keyword search “rock cycle.” Then click on the Promethean tab. You can choose from four different Promethean flip charts to help your students learn about the rock cycle.
- **5th Grade Math:** Keyword search “fractions.” Then click on the Learning Exercises tab. *BBCi: Revise Wise Maths: Wise Up! Fractions* can be used for multiple levels of difficulty.
- **ELL:** Keyword search on “listening comprehension.” Expand the tabs to show that resources on this topic are available in a variety of languages. Click on the Spanish tab. Then select *Listen & Learn about Finn's Toys: Los Juguetes de Finn*.
- **ELL:** Drill-down search: English Language Learners > ELL Skill Development > Reading > Stories. Sort for Readability 1 to display 40+ easy-to-read stories. The Look for one of the *Mami and the FableVision* sites. Any of these would be fun to demo.
- **ELL:** Keyword search “story of creation”. The *Kids 4 Truth* site is a wonderful animation available in twelve different languages.

Middle School:

- **5th-6th Language Arts (Myths):** This unit can be completed in 4 days using 1 hour for each day to complete the unit. It can be adapted for other grades.

A keyword search for “myths” will yield many useful sites for myths.

Day 1: Students read the definition of a myth from the Scholastic website. (http://teacher.scholastic.com/writewit/mff/myths_mymyth.htm). Watch four online Flash videos of myths from a site called Winged Sandals (<http://www.wingedsandals.com>).

Day 2: Read myths from various countries on the Scholastic website (<http://teacher.scholastic.com/writewit/mff/myths.htm>) and read the myth of Pegasus on a website called “Windows to the Universe” (<http://www.artsmia.org/world-myths/index.html>). Discover information about 32 of the Greek gods and goddesses along with illustrations of these deities on the Winged Sandals website (<http://www.wingedsandals.com>).

Day 3: Students view various cultural myths as depicted in art form from the Minneapolis Institute of Arts (<http://www.artsmia.org/world-myths/artbyculture/greek.html>). Students can catch chicken feathers to make wings and fly away while trying to avoid the sun like Icarus and Daedalus in a game they can play online from Winged Sandals (<http://www.wingedsandals.com>).

Day 4: Use the myth brainstorming machine from Scholastic to help them begin writing their own myth. (<http://teacher.scholastic.com/writewit/mff/mythmachine.htm>). Students can publish their own myths online at Scholastic.com at a later date. (http://teacher.scholastic.com/writewit/mff/myths_publish.asp). Your students should definitely be able to identify myths at this time

- **6th Grade Social Studies:** Image search for “Aztecs” or other ancient civilizations. Then you can have your students write illustrated fictional narratives.
- **6th Grade Science:** Keyword search “ecosystems.” Then use Readability to help students find results based on scores of a 2, 3, or 4, depending on the student’s reading level. If you would like a Readability of 3, then try using *MBGnet: Biomes & Ecosystems of the World*.

- **7th Grade Mathematics:** Keyword search "central tendency." Select the *Measures of Central Tendency - Quiz* site. This quiz can be used as a review activity.
- **7th Grade Social Studies:** State Standards searches can be useful for teachers who are changing their curriculum. If you are changing from US History to Ancient World History, then you can study the standards of your new curriculum.
- **7th Grade Science (Cell Parts):** Click on Middle School Tab>Science>Cell Biology>Cell Part>Eucaryotic Cell Interactive Animation. Select Animal Cell.

Lesson 1: Draw a complete animal and plant cell picture on large white drawing paper. Label each part of the cell. Cell pictures are posted on the school hall walls.

Lesson 2: Complete a drawing booklet of the animal and plant cell. The Cover Sheet will have a Title, Student Name and Date on the front. Cover Sheet is designed with cell parts scattered around on the front of the booklet. Next page is a Table of Contents telling the names of the cell parts and what page the drawing is located. Next, each cell part is drawn on a page with the cell part name at the top of the page. Included with the drawing is a written statement of the function of the cell part for the cell. Each cell part is colored with colored pencils so as not to have the color bleed through to the next page. Identifying the cell part as belonging to the animal cell, plant, or both is done at the bottom of the drawing page.

Lesson 3: 3-D models of the animal or plant cell. Students will use white colored paper, scissors, and glue sticks. Students will cut out a cell membrane for an animal cell, or a cell wall and cell membrane for a plant cell, and paste it down on a large white piece of poster paper. Students will then draw each cell part on a different piece of colored paper. Cut the drawing out and paste the cell part inside a cell membrane for the animal cell, or cell wall and cell membrane for the plant cell. After a complete animal or plant cell 3-D model is completed, student will label the cell parts of the model. Teacher will post the models on the school hall walls and have the art teacher and other science teachers judge the models. Ribbons are awarded for the top 10 models.

- **8th Grade Social Studies:** Each student is assigned a state. They have to make a slide-show presentation about their state and show it to the class. One slide has to include the biography of a person important to their state's history. The person search and timeline feature in netTrekker has made it easier to search for information for their biographies.
- **8th Grade Language Arts:** As a tie-in between literature and art, I did a search for "artistic styles." I found Collage as a type that I felt like was a good fit for our students. (We do not have Art as a class in the school.) From there I looked up Collage and found a remarkable lesson plan on Romare Bearden, a true collage artist. The students learned the style from this lesson plan and what can be done with collage. Then they will use it to illustrate an Essential Literature book called "Slam."
- **8th Grade ESL:** In English Learners, keyword search "world cultures". After receiving your results, click on the Lesson Plan tab. *Scholastic: Global Trek* can be used for a lesson on exploring traditions and cultures of the world.
- **Health (English or Spanish):** English Learners Kkyword search for "body." *Kidshealth: My Body* can be used for English and Spanish speaking students.
- **Health ELL:** Keyword search "food pyramid guide" and refine for Spanish. The *U.S. Department of Agriculture: MiPirámide* site is excellent. Once the site is launched, click "Tour de MiPirámide" to launch a nice Spanish-language animation.
- **Language Arts ELL:** Drill-down search: English Language Learners > ELL Skill Development > Vocabulary > Word Games. Lots of choices here. Try *Harcourt School: Wordworks*.

- **Language Arts ELL:** Keyword search “verbs.” This is good to show readability levels, Spanish-language sites, and standards alignment.

High School:

- **9-12 Math (Manipulatives):** Keyword search “virtual manipulatives.” Save to your shared folder. Students can go to the NLVM: Interactive Mathematics link. They can click on Algebra I under 9-12. Then they can click on Algebra Balance Scales. This is an excellent interactive site. We did this as a class in the computer lab. Then the students can get on it from home and continue to practice. You can extend the lesson with Algebra Balance Scales-Negative. Many of my students finally understood how to balance equations with this website.
- **9-12 Biology:** I like to do this exercise in the computer lab so all the students have access to a computer. Go to netTrekker Biology section. Show/tell them (I use PowerPoint) important vocabulary words and ask them to find the definition (I also require them to write the definition; therefore they end up with a study sheet) as quickly as they can without using the search bar at first. If they are having trouble finding the word I can then tell them the category in netTrekker where they can find the information, therefore helping them learn to search documents quickly, and if they still can't find the word I will allow them to use the search bar. In the process the students learn skills that will help them succeed in college. I make it a game type of environment with suitable incentives.
- **9-12 Biology:** I had a handout printed in black and white, and it pictured the aphotic zone in the ocean (with tube worms as part of the diagrams, but was simply labeled worms). A student was wondering if the diagram showed earthworms because she had never seen tube worms. I was able to go to netTrekker and do an image search and pull up several pictures of different types of ocean worms in mere seconds.
- **9-12 Biology:** My anatomy students didn't have texts for several weeks so trying to find visuals was hard—especially color. I looked with other search engines and all the top sites were pay for service sites, I did a quick search on netTrekker and immediately found free color plates of the whole body in various stages of dissection.
- **9-12 Biology:** Using netTrekker searching for information on “Darwin,” we came up with information about evolution that no other science teacher had heard of before; the students were able to find out about evolution ideas developed before Darwin and how those ideas influenced him. The search for famous people pulled up many wonderful resources.
- **9-12 Guidance & Counseling (Career Exploration):** Keyword search “careers.” Choose the *Bureau of Labor Statistics (BLS) Career Information: What Interests You?* Have students research at least two career choices in different areas, write down what it takes to get ready, how much the jobs pay, how many jobs there are projected to be, other jobs like those, and where you can find more information. If students are unsure of careers which interest them, you could have them explore other links to narrow down fields of interest, then complete the above project.
- **9-12 Guidance & Counseling (Scholarship Search):** Keyword search “scholarships.” Choose *Fastweb-Matching Students to Scholarships*. Have students complete a profile on Fastweb, and write down at least 5 scholarships they qualify for based on the information they entered in their profile. Have students complete an application for at least 5 scholarships, and turn in copies of their applications to their counselor within two-three weeks. File in their guidance records.

- **9-12 Art, 2006-2007 Academic Decathlon:** I am a librarian at Madison High School, and I also coach the Academic Decathlon team at our school. The focus of the art component in AD for this year is Asian art, and the majority of the pieces are found at the Minneapolis Institute of Art. I had my students visit the museum on-line and look at the selections by looking under visual art. That led them to a list of U.S. museums, and they selected Minnesota, especially the Minneapolis Institute of Art. From there they accessed the exhibits. Seeing the exhibits in a different environment helped visualize them more easily. In addition, there was additional information about each piece.

- **Social Studies (Global Studies):** Use the Famous Person and Timeline features. Go to the Famous Person tab, select 20th century, entrepreneurs, and European (West), and students may choose to study Andrew Carnegie or John Maynard Keynes. Click on the Timeline button next to the famous person's name.
- **Social Studies (Global Studies):** Reference Tool for Maps, Geography, and Almanacs. Students can find country information.
- **Social Studies (Current Events):** Keyword search for "World News". Have students research current events using country newspapers.
- **Social Studies (Government):** Reference Tool for US Government. AP Government students can research Supreme Court cases.
- **Language Arts:** Famous Person search "Shakespeare." Look at the British Literature Timeline for Shakespeare. Have your students gather notes from selected websites on Shakespeare, and write a research paper on how the events during Shakespeare's time, as well as the events in his personal life, influenced his writing.
- **Language Arts:** Keyword search "Scarlet Letter". Students can use the Dictionary Key to aid them in reading the book. Have students keep a word document on the words they look up for future study.
- **Science (Biology):** Keyword search "cell reproduction." Have the students formulate questions as they go through the various websites. These questions can be used for review, quizzes, or tests.
- **Science (Chemistry):** Drill Down for Chemistry>Particle>Periodical Table of Elements. Have your students research individual elements. For fun, have your students keyword search for Hangman. Then click on *Superkids: Hangman* to play a learning game on the elements.

- **Mathematics (Algebra and Geometry):** Keyword search "equations." Click on the Promethean tab. You can use the *Promethean: Equations* resource for bell work or supplemental material for standardized testing preparation.
- **Mathematics (Geometry):** Famous Person search for a Mathematician. Students will write a five paragraph essay on the importance of their chosen mathematician.
- **Health:** Drill Down for Health>Disease Conditions and Disorders or Health>Alcohol, Tobacco, and Other Drugs. Have your students research various types of drugs and the harmful effects.
- **Foreign Language:** To supplement your own activities for teaching adjectives in Spanish class, drill down: Foreign Language>Spanish>Learning to Speak Spanish>Grammar>Adjectives. Find activities on adjectives in general, or drill farther to focus specifically on Formation and Placement, Comparatives and Superlatives, Numbers, or Possessive Adjectives.
- **Art ELL:** Keyword search "Mexican art" and refine for Spanish. *PBS: The Life and Times of Frida Kahlo* site is a fabulous site, including excellent illustrations and

wonderful content, on this well-known Mexican artist. After the site comes up, click the Spanish button to access the Spanish mirror site. The site is marked controversial because it talks about Kahlo's very stormy relationship with her husband Diego Rivera, but all is handled with great sensitivity.

- **Science ELL:** Keyword search on "plants" and refine for Spanish. Click on the *Chicago Field Museum: Tropical Plant Guides* site.