

SHADOW TRACKERS....

From Photography to Writing

A fourth/fifth grade multidisciplinary unit
for mild disabilities based on Principals
of Universal Design and Differentiated
Instruction

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Teacher Library

What materials and resources will be useful for teachers?

<http://www.readinga-z.com/index.php>

"It's About Time" - Level K (Short nonfiction book and comprehension questions)

http://hea-www.harvard.edu/ECT/the_book/index.html

Eyes on the Sky: Feet on the Ground (hands on astronomy activities for kids)

<http://hea-www.harvard.edu/ECT/Hello/hello.html>

Lesson guide and background information for movement of the sun and rotation of the Earth activities

<http://livingearth.com/>

Live camera shots of places around the world.

<http://www.ajkids.com/index.asp?origin=0&meta=1>

Ask Jeeves for Kids

<http://www.donjohnston.com/downloads/downloads.htm>

Don Johnston SOLO software - download science and nature topic dictionaries for word prediction when word processing

Learner Activities

What materials and resources will be useful for engaging students in meaningful learning activities?

To correspond with the investigations of Day and Night, we have collected a set of web sites which will show you live pictures of different places around the world. Although we cannot fly everyone to these sites, we can at least go there by way of the Internet.

[Day/Night Globe](#). This is a picture of the whole Earth that you can click on to zoom in on. It is shaded according to which part of the world is having night and which is having day. You can also change your viewpoint from a plain world map to what the Earth looks like from the Sun or Moon. You can get weather features on the map as well as other features.

[World Map](#). This is a site with a world map marked with red dots where there are live cameras.

Here are some selected sites:

What time of day is it? What season is it? Where is it on the Earth?

[Cambridge, England](#)

[Mt. Fuji, Japan](#)

[Sydney, Australia](#)

[Fairbanks, Alaska](#)

- [Around the World in 80 Clicks](#). A guided tour around the world through 80 live cameras.

Standards

What standards will be met through this unit?(Indiana State Standards)

Science:

- 4.3.8 Explain that the rotation of the Earth on its axis every 24 hours produces the night-and-day cycle.
- 4.3.9 Draw or correctly select drawings of shadows and their direction and length at different times of day.

Math:

- 4.5.9 Add time intervals involving hours and minutes.

Social Studies:

- 3.3.4 Explain basic Earth/sun relationships*
*the rotation of the Earth on its axis, the revolution of the Earth around the sun, and the tilt of the Earth on its axis
- 4.3.3 Explain the essential facts of Earth/sun relationships*
*Cardinal directions: North, South, East, West
*Intermediate directions: Northeast, Southeast, North-west, and Southwest

Language Arts:

- 3.1.7 Use a dictionary to learn the meaning and pronunciation of unknown words.
- 3.2.6 Locate appropriate and significant information from the text
- 3.4.3 Create single paragraphs with topic sentences and simple supporting facts and details.
- 4.4.7 Use multiple reference materials and online information as aids to writing.
- 4.4.9 Use a computer to draft, revise, and publish writing, demonstrating basic keyboarding skills and familiarity with common computer technology.