

TIDES ACTIVITY

1. View Online and Discuss:

<http://www.onr.navy.mil/focus/ocean/motion/tides1.htm>

<http://www.mmscrusaders.com/newscirocks/tides/tideanim.htm>

2. Then Do Activity:

1. Have the class form a circle in a large area. This could be in the classroom, gymnasium, on a lawn, or on the playground.

2. The ideal way for students to sit is crossed-legged with hands holding the next person's elbows to form a strong circle. If the class is reluctant to touch, have them kneel "knock-kneed" next to each other in a circle.

3. One person is the moon and moves around the outside of the circle. The circle is the waters of the earth. As the moon passes behind the students (water), the waters bulge (lean) toward the moon, and then into the center as the moon passes. As the moon moves, have the students that are opposite the moon lean away from the moon (this represents water bulging out on the opposite side of the earth) and then have them lean into the center as the moon passes.

4. Have the moon stop, and let the class see where the high tides are (next to the moon and at the opposite side of the circle). Then the moon continues to circle. Have the moon stop at several points in the circle and let the class see where the high and low tides are in relation to the orbit of the moon. (Low tide will be at the sides halfway between the high tide bulges.)

5. The moon can then circle the earth several times so the rhythm of the passing of the moon and the bulging of the waters is experienced by the class. Before ten minutes are up, even first and second graders have a feel for how the moon affects the tides.

3. Then Do Tides Booklet:

- a. Cut out diagrams and labels.
- b. Fold a full sheet of colored paper in half hamburger style. Cut on line.
- c. Place one piece of paper on top of the other. Fold in half again, hamburger style again. Staple at fold.
- d. Glue title page on front and name tag on back.
- e. Glue each picture inside with corresponding facts page.
- f. Fill out each fact page.
- g. Line up for points.
- h. Use booklet to answer Tides Review questions.

My Tides Booklet

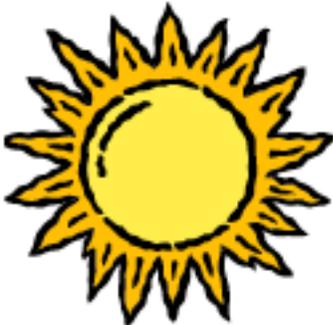
High Tide

Low Tide



High Tide Facts:
Occurs _____ a day.
Water _____ to its highest level.
Water is the _____ up the beach.
Occur during _____ moon phase.

Low Tide Facts:
Occurs _____ a day.
Water _____ to its lowest level.
Water is the _____ down the beach.
Occur during _____ moon phase.



Spring Tide



Neap Tide



Spring Tide Facts:
Occurs _____ per month.
High Tides reach their _____ level.
Occur during _____ and _____ moon phases.
Occur when the Sun, Moon and Earth _____.

Neap Tide Facts:
Occurs _____ per month.
High Tides reach their _____ level.
Occur during _____ and _____ moon phases.
Occur when the Sun, Moon and Earth _____.

Goes on front of booklet with title

