



Kinesthetic Student Activity

This activity is suitable for grades 4-6. It requires that you interact with students in a class. If that opportunity is not available to you, conduct the activity with an age-appropriate group of children of friends or family. In that case you would work with one group of 3.

This activity helps to develop an understanding of the orbit of the earth and the moon. It provides an opportunity for students to understand the concepts by having them become physically involved in illustrating them. You will need sufficient space for participants to walk around in groups.

Solar System Activity

Use the solar system as an example for your students to assist in illustrating two concepts:

1. A lunar eclipse
2. A solar eclipse

Ask participants to work in groups of three. If the number of students in the class is not divisible by three, join one of the groups or add a fourth member to "direct" the activity. Instruct the groups to illustrate their understanding of the sun, the earth, and the moon during a lunar eclipse by acting as the celestial bodies. Have one student take on the role of the sun, another the role of the earth, and the third the role of the moon. Have them explain their actions as they act out the eclipse.

Once the participants have acted out the roles, expand the challenge by asking them to explain why we do not have a lunar eclipse every month on the full moon or a solar eclipse at every new moon.

Answer the following questions:

- As each group completes the activity, ask them to comment on how effective they found the exercise in helping them to understand the relationships between the three bodies and the mechanics of an eclipse. Was there a common response?
- Report on your overall impression of student engagement, support for learning the concepts, and ability to link the learning to other content. Do you think the students will better remember what they demonstrated and be able to recall the elements and events of an eclipse?
- Describe an activity you could create to provide a similar kinesthetic learning experience. How would the kinesthetic aspect of the activity support learning and retention?