



rotation:
when something moves in a circular movement
around a central point

Mars Rover Model Celebration – Lesson Plan

Introduction:

TEACHER: Please introduce the REVOLUTION vocabulary card before discussing ROTATION. In this way you can have the students complete the last activity in the Make it Personal section below.

One of the new vocabulary words for this unit is “rotation”. Rotation has several meanings. In today’s lesson, rotation means “when something moves in a circular movement around a central point”.

Let’s look two pictures that will help us understand this meaning of the word “rotation”. The first picture shows a globe. Since the globe is transparent, you can see a metal pole going from the North to the South Pole. This is the central point of the globe and is also called the axis. The globe moves (or spins) around this axis and this movement is called rotation. The other picture shows a top. Just like the globe, the top is spinning around a central point. The top is rotating.

Example:

Here is another example: Our planet rotates on its axis. The Earth makes one full rotation every 24 hours. That is why we have day and night. As our planet rotates, part of the Earth is facing the Sun. That part of the Earth has daytime. As the Earth’s rotation continues, that part of the Earth turns away from the Sun. That part of the Earth then has night.

Reflection:

I am going to name some things that move. If they move in a rotation, I want you to put your thumbs up and say ROTATION. If they do not move in a rotation, put your thumbs down and remain quiet.

- A skater spinning in the same spot on the ice (thumbs up)
- The waves of the ocean reaching the beach (thumbs down)
- A soccer player running down the field (thumbs down)
- A basketball spinning on a player’s finger (thumbs up)

Make it personal:

As you have seen, we can make things move in a rotation. However, people can also move themselves in a rotation. Think of a time that you have moved in a rotation. What were you doing? Were you standing or sitting? Remember, when you move in a rotation, you are spinning around a central point. Share your rotation story with a neighbor. Start your sharing with, “I moved in a rotation when I...” After you finish, I will ask some of you to share your rotation story with the class.

TEACHER: As a closing activity to check understanding, have your students stand up and move in a rotation (turning in one space), then in a revolution (moving around another object) and then both in a rotation and a revolution at the same time. You can make this fun by changing frequently between rotation and revolution.