

Rotation

5th Grade

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Benchmarks:

(5th) ES1: Describe how night and day are caused by the earth's rotation

Objectives:

Students should gain a clear understanding of rotation. This knowledge will help them understand day and night in subsequent lessons. They will later be able to discern rotation from orbit

- The earth spins on its axis with one rotation every 24 hours
- A rotation occurs around a fixed line called the axis of rotation
- Students will draw the axis for various rotating objects

The students should learn: The mechanics of rotation. How rotation varies with shape and mass.

Materials: Bring in coins to rotate. Also have students find objects in the room to spin.

Procedure: Ask students to define rotation? Get a good list up on the board. Then ask them how we can conduct an experiment on the rotation of different objects. If they don't suggest anything ask them to rotate 6 different objects in the room. Ask them if they know what the axis of rotation is. If they do not answer, demonstrate by drawing of the objects.

Discussion:

Students can then be given pictures of or additional objects that they can hypothesize where the axis of rotation is. They should justify their hypotheses in the case of pictures. Or they should see how well they were able to guess, now that they are all experts on rotation.