

Title: Rotate, Rotate, Revolve

Objective: Review the terms rotate and revolve

Time: 5 minutes

Materials Needed: None

Greeting

Suggested Season: Any

Suggested Grade Level: 3-5

Indoors or Outdoors: Either

Theme: Astronomy

Topic: Solar Systems/Planets

Directions:

1. Students stand in a circle.
2. One student is *it* and walks around *inside* the circle lightly tapping each student as they pass. As they tap a student, they say, “Rotate.” Each tapped student then rotates once around in their spot while *it* moves on to the next student. (Similar to “duck, duck, grey duck”, but without chasing!)
3. Eventually *it* taps a student and says, “Revolve.” The chosen student must join *it* in the center of the circle and revolve around *it* one time.
4. While revolving, the chosen student greets the *it* player by saying: “Good Morning Sun!”
5. The sun replies: “Good Morning, Planet!” and takes the newly chosen player’s spot in the circle, sitting down to show they have already been greeted and cannot be chosen again.
6. Return to step 2 with the newly chosen player being *it*. Continue until all students have been greeted and are seated.

Discussion Questions:

1. What else can you think of that rotates? Revolves?
2. How is the Earth’s rotation related to the time of day?
3. How does a planet’s revolution affect its seasons?

Standards Addressed:

Science: 3.3.3.2.2.

Language Arts: K.I.B.; K.II.B.; K.III.A.; 1.III.B.1.; 2.III.A.; 3.I.B.1. ; 3.III.A.1.; 3.III.A.2.; 3.III.A.1. ; 3.III.A.2. ; 3.III.A.3.; 3.III.A.6.; 4.I.B.1.; 5.I.B.; 5.III.A.1.; 5.III.A.2.

Math:

Social Studies:

Background Information:

- **Rotate:** when a planet spins on its axis.
- **Revolve:** when a planet circles around another planet or the sun.
- The part of the Earth facing the sun experiences daylight while the part of the Earth turned away from the sun has night.
- The Earth rotates once every 24 hours and revolves around the sun once every year or $365\frac{1}{4}$ days.

Additional Resources:

- *The Reasons For Seasons*, by Gail Gibbons
- *Our Solar System*, by Seymour Simon

Correlates with:

Activity – Rotate, Rotate, Rotate your Planet

News and Announcements – Hemispheres and Seasons