Lesson Plan: Total Solar Eclipse Elementary School

Grade level: Elementary School

Objectives:

Students will understand what a solar eclipse is and how it occurs.
Students will describe the difference between a partial and total solar eclipse.
Students will explain the safety precautions needed when viewing a solar eclipse.
Students will create a model of a solar eclipse.

Materials:

Pictures and videos of solar eclipses
Solar eclipse diagrams
Safety glasses for viewing the solar eclipse
Worksheets and handouts
Art materials for creating a model of a solar eclipse

Introduction (10 minutes):

Show pictures and videos of solar eclipses and ask the students if they have ever seen one before.
Ask the students what they know about solar eclipses and record their responses on chart paper.
Introduce the objectives for the lesson.

Body (60-70 minutes):

1. What is a Solar Eclipse?

Discuss what a solar eclipse is and how it occurs when the moon passes between the sun and Earth.
Show diagrams of solar eclipses and explain the difference between a partial and total solar eclipse.

2. Safety Precautions

Explain the importance of viewing a solar eclipse safely and provide examples of appropriate eye protection such as solar eclipse glasses or a pinhole projector.
Have the students practice using the safety glasses and create their own pinhole projector.

3. Model of a Solar Eclipse

Have the students work in small groups to create a model of a solar eclipse using art materials such as paper, clay or playdough.
Provide examples of what the students can include in their model such as the sun, moon, and Earth.

4. Observing the Total Solar Eclipse

Discuss the upcoming total solar eclipse on April 8 and the best locations for viewing it.
Have the students make observations of the eclipse using safety glasses or pinhole projectors and record their findings.

Conclusion (20-30 minutes):

Have the students share their models of solar eclipses with the class.
Discuss the importance of protecting our eyes when viewing the solar eclipse.
Ask the students to reflect on what they have learned and discuss their observations of the total solar eclipse.

Assessment:

Monitor student participation during the lesson.
Evaluate the quality of the students' models and their understanding of solar eclipses and safety precautions.
Assess the students' observations of the total solar eclipse and their ability to communicate their findings.