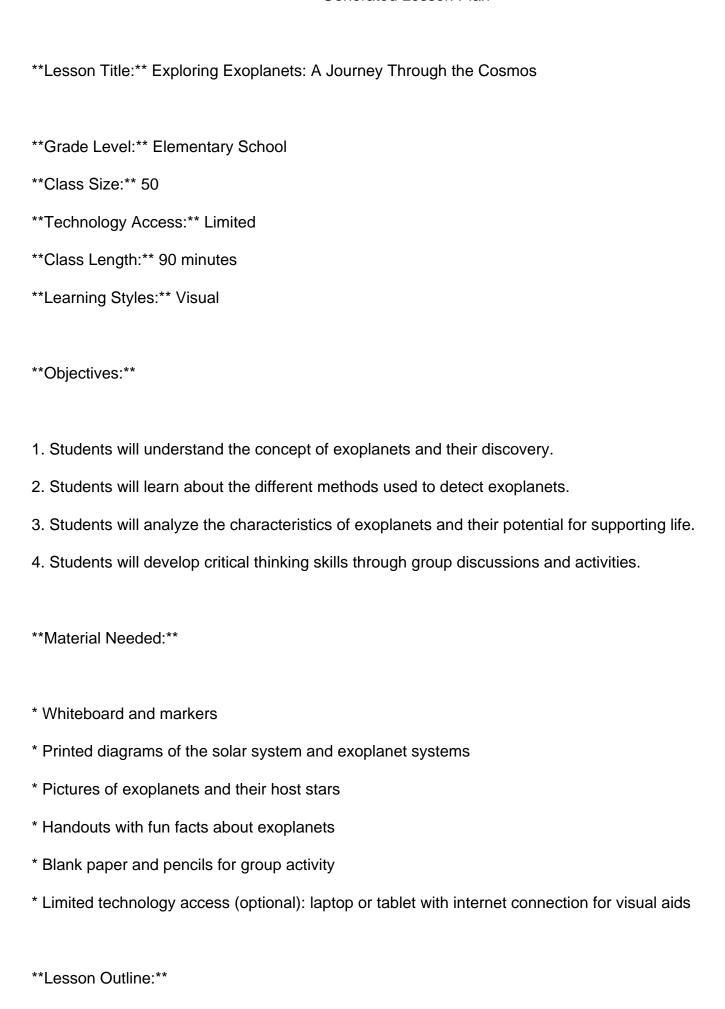
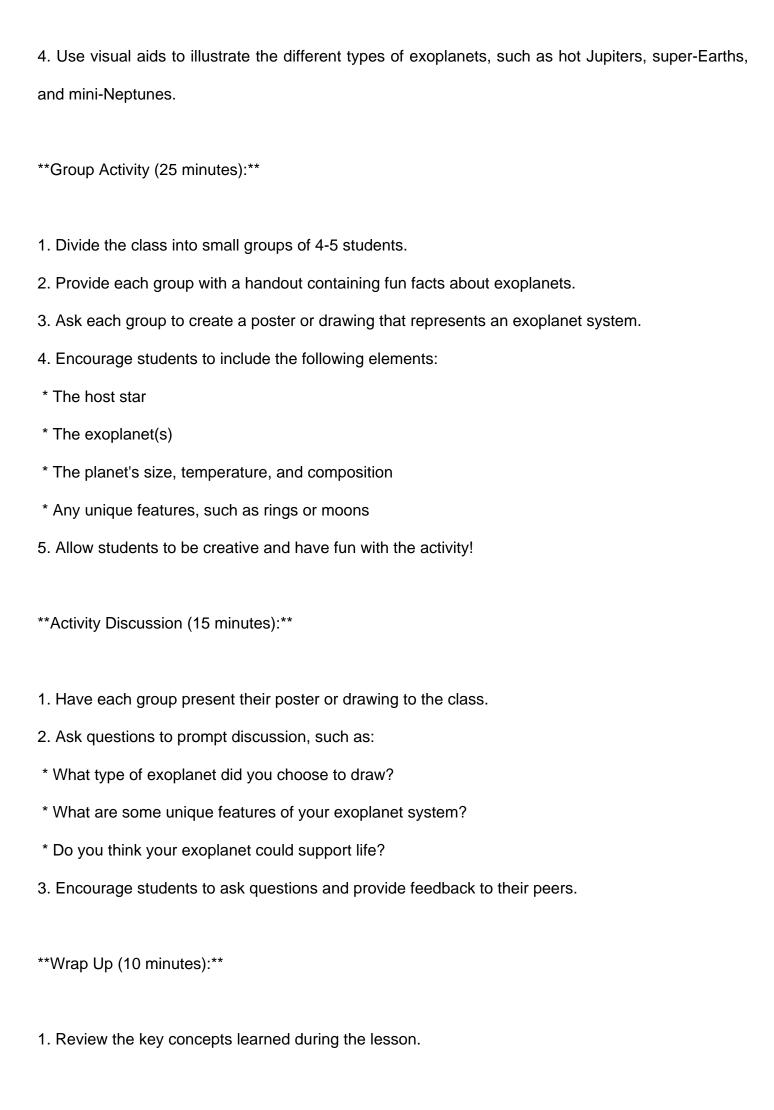
Generated Lesson Plan



- I. Introduction (10 minutes) II. Presentation (20 minutes) III. Group Activity (25 minutes) IV. Activity Discussion (15 minutes) V. Wrap Up (10 minutes) VI. Home Assignment (5 minutes) **Introduction (10 minutes):** 1. Begin by asking students if they know what exoplanets are. 2. Write the word "exoplanet" on the board and ask students to share any ideas they have about what it might mean. 3. Provide a brief definition: "An exoplanet is a planet that orbits a star outside of our own solar system." 4. Show students a diagram of the solar system and ask if they can identify the planets. 5. Explain that there are many other stars in the universe with their own planets, and that's what we'll be exploring today. **Presentation (20 minutes):**
- 1. Show students pictures of exoplanets and their host stars.
- 2. Explain the different methods used to detect exoplanets, such as:
- * Transit method: measuring the decrease in brightness of a star as a planet passes in front of it.
- * Radial velocity method: measuring the star's wobbling motion caused by an orbiting planet.
- * Direct imaging: capturing images of exoplanets directly using powerful telescopes.
- 3. Discuss the characteristics of exoplanets, such as size, temperature, and composition.



3. Provide a preview of the home assignment and answer any questions.
Home Assignment (5 minutes):
1. Ask students to research and write a short report about a specific exoplanet.
2. Encourage students to include the following information:
* The exoplanet's name and location
* Its size, temperature, and composition
* Any unique features or characteristics
3. Allow students to be creative and include pictures or diagrams to illustrate their report.
Assessment:
* Participation in class discussions and activities (20 points)
* Group poster or drawing (30 points)
* Home assignment report (50 points)
Extension:
* Invite a guest speaker to talk to the class about exoplanet research.
* Have students create a model of an exoplanet system using different materials.
* Ask students to write a short story or create a comic strip about a hypothetical exoplanet.

2. Ask students to reflect on what they learned and what they found most interesting.