

Slide 1: Introduction to Exoplanets

Title: "Exploring Exoplanets: Worlds Beyond Our Solar System"

Content: Define exoplanets and explain their significance.

Visuals: Image of a distant star with orbiting planets.

Slide 2: The First Exoplanet Discovery

Title: "The Pioneer: 51 Pegasi b"

Content: Discuss the discovery of 51 Pegasi b in 1995 by Michel Mayor and Didier Queloz.

Visuals: Artist's rendition of 51 Pegasi b orbiting its star.

Slide 3: Methods of Detecting Exoplanets

Title: "How Do We Find Them?"

Content: Introduce the radial velocity method and the transit method.

Visuals: Diagrams illustrating both detection techniques.

Slide 4: The Kepler Space Telescope

Title: "Kepler's Quest"

Content: Overview of the Kepler mission and its impact on exoplanet discovery.

Visuals: Image of the Kepler Space Telescope in space.

Slide 5: The TRAPPIST1 System

Title: "A Planetary Treasure Trove"

Content: Detail the seven Earth-sized planets orbiting TRAPPIST1, discovered in 2017.

Visuals: Artist's impression of the TRAPPIST1 planetary system.

Slide 6: The James Webb Space Telescope (JWST)

Title: "A New Era in Space Exploration"

Content: Discuss JWST's capabilities in studying exoplanet atmospheres.

Visuals: Image of JWST with its goldplated mirrors.

Slide 7: The Search for Habitable Planets

Title: "Looking for Earth 2.0"

Content: Explain the criteria for habitability and the significance of the habitable zone.

Visuals: Diagram showing the habitable zone around a star.

Slide 8: Exoplanet Exploration Resources

Title: "Dive Deeper into Exoplanets"

Content: Provide links to interactive websites and games for further learning.

Visuals: Screenshots of recommended educational websites.

Slide 9: Conclusion

Title: "The Journey Continues"

Content: Summarize the excitement and importance of ongoing exoplanet research.

Visuals: Inspirational image of a child looking through a telescope at the night sky.

Additional Resources:

Interactive Learning: Explore NASA's [Eyes on Exoplanets](<https://exoplanets.nasa.gov/eyesonexoplanets/>) for a 3D journey through known exoplanet systems. ■■

Educational Games: Visit [NASA Kids' Club](<https://www.nasa.gov/learningresources/nasakidsclub/>) for games and activities related to space exploration. ■■

Lesson Plans: For educators, [NOVA's Exoplanet Lab Lesson Plan](<https://www.pbslearningmedia.org/resource/nvexlsciexoplanetlablessonplan/novaexoplanetlablessonplan/>) offers structured activities to engage students in exoplanet discovery.■◀

These resources provide a comprehensive and engaging overview of exoplanets, tailored for young learners eager to explore the cosmos.■◀