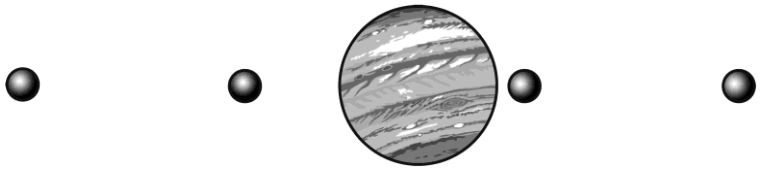
Task Sheet

Jupiter's moons

In 1610, the astronomer Galileo Galilei looked through his telescope and saw the planet Jupiter. He made drawings of what he saw through his telescope and recorded how long each moon took to orbit Jupiter. The drawing and information is recorded below.



Name of Moon	Time to orbit Jupiter (in Earth years)
Io	1.7
Europa	3.5
Ganymede	7.1
Callisto	16.7

Task:

Use your knowledge and understanding of the solar system topic and the information above to answer these questions in as much detail as possible.

- How do the moons stay in orbit around Jupiter?
- What is the name of each of the moons in the diagram?
- Which moon would look the brightest from the surface of Jupiter?

Level ladder:

What is your target level? Use the level ladder to help you reach it:

challenge	You might have:
Easy	• Explained simply how the moons stay in orbit around Jupiter. • Drawn the diagram, identified Jupiter and named the four moons. • Explained how you decided which moon was which. • Listed the order of brightness for each moon as seen from Jupiter's surface, explaining your reasons.
Medium	• Explained how the moons stay in orbit around Jupiter. • Drawn the diagram, identified Jupiter and named the four moons. • Explained how you decided which moon was which. • Drawn a simple diagram to explain how the moons could be seen from Jupiter and explain which moon would appear brightest.
Hard	• Explained how the moons stay in orbit around Jupiter. • Drawn the diagram, identified Jupiter and named the four moons. • Explained how you decided which moon was which. • Drawn a simple diagram to explain how the moons could be seen from Jupiter and explain which moon would appear brightest. • Identified any assumptions made in answering the questions and suggested alternative explanations.