Year 9 Science: Asteroids, comets, meteors and scale models of the Solar System

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. Saturn is 9.5 AU from the Sun. How far is that in kilometres?

2. Which unit would you use for each: the width of Mars, the distance from the Sun to Uranus, the distance to the Southern Cross stars? Give a reason for one of them.

3. A rock lands in a paddock in Canterbury after streaking across the sky. Name the streak and name the rock.

4. In the beach-ball model, where 1 AU is 32 m, how far from the ball does Mars (1.52 AU) go?

5. A comet's tail points to the left of the comet in a photo. Which way is the Sun, and why?

Fix the mistake

6. Correct this statement: "A meteor and a meteorite are the same thing."

7. Correct this statement: "A comet's tail trails behind it, showing where it has come from."

8. Correct this statement: "Jupiter is 5.2 AU away, so it is 5.2 × 150 = 780 km from the Sun."

9. Correct this statement: "The asteroid belt is so packed with rocks that spacecraft have to steer around them."