

- 1 Look at these images of different balls.
- a) Circle the ball that would be best to use to model the Sun.



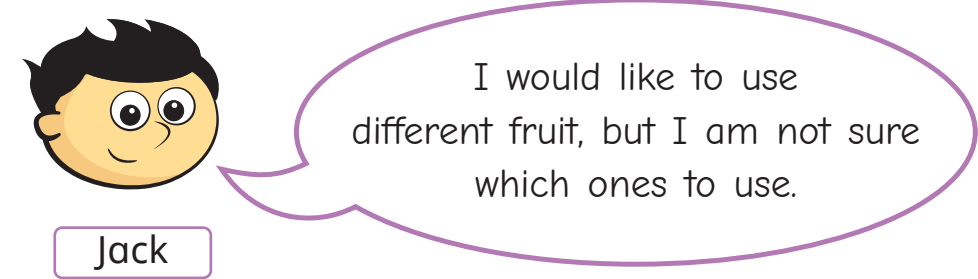
- b) Circle the ball that would be best to use to model Jupiter.



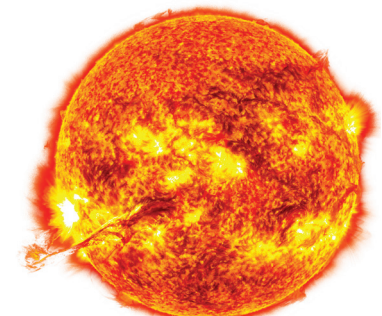
- c) Circle the ball that would be best to use to model Earth.



- 2 Jack wants to model the Sun, Earth, Jupiter and Mercury.



What fruit could Jack use to model them?



Sun



Earth



Jupiter



Mercury

Are your answers the same or different to your partner?
Talk about your ideas with a partner.



- 3 Annie has researched the size of the planets and wants to use different balls to model them.

She has drawn this table to compare the sizes of the planets.

| Planet | Approximate diameter (km) |
|---------|---------------------------|
| Mercury | 4,879 |
| Venus | 12,104 |
| Earth | 12,756 |
| Mars | 6,792 |
| Jupiter | 142,984 |
| Saturn | 120,536 |
| Uranus | 51,118 |
| Neptune | 49,528 |



rugby ball



basketball



marble

- a) Should Annie use the rugby ball to show a planet?

Explain your answer.

- b) Which planet can be modelled using the basketball?

Explain your answer.

- c) Which planet can be modelled using the marble?

Explain your answer.

- 4 Amir and Whitney have made different models of the Solar System.



Amir

I have used a tennis ball to model the Sun and eight circular buttons to model the planets orbiting the Sun.



Whitney

I have made my model using a tennis ball to represent the Sun and different sized polystyrene balls to represent the planets.



Compare the two models made by Amir and Whitney.

Which model do you prefer and why?

How could they improve their models?