## SPACE JUNK - IEVEL 2

Space junk - or space debris - is made up of the objects that people have sent into space but which are no longer used. They could be old satellites or parts of space rockets that have broken up. Space junk orbits the Earth at several kilometres per second and can crash into important satellites or space vessels with people in. Your task now is to write code for a game where you collect space junk!

Before you can start coding, you need to calculate how many points a piece of space junk is worth! There are four types of space junk that you have to collect: a circle, a square, a triangle and a rectangle. The more the object weights, the more points you get for it in the game. You get one point for every ton the object weighs. The heavier the junk you collect, the more points you get from the game.

But, as you probably know, objects in space do not weigh the same as they do on Earth. So you won't know the weight of the object on Earth until you get there. Luckily, the tricky tardigrades know how much everything would weigh if it was on Earth, but because they like puzzles, they won't tell you the weight. Instead, they will give you the answer as a mathematical riddle. Your first task is to solve it.

## WHAT THE TRICKY TARDIGRADES SAY:

"I know exactly what they all weigh on Earth, but I'm not going to tell you. You'll find out if you solve this riddle."

- In total, the circle, the square, the triangle and the rectangle weigh $50,000 \mathrm{~kg}$. However, space junk is weighed in tons. How many tons are there in 50,000 kg ?
- The circle weighs one-fifth of what all the objects weigh together.
- The square weighs $50 \%$ of the circle.
- If you multiply the weight of the circle by two, and then subtract the weight of the square from you answer, you get the weight of the triangle.
- The rectangle weighs four times as much as the square.

| Answer <br> The objects weigh <br> this much: | The circle weighs___tons.The triangle weighs <br> tons. |  |
| :--- | :--- | :--- |
|  | The square weighs ___tons. | The rectangle weighs <br> tons. |

