

SPACE JUNK - LEVEL 3

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 weighs, 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 kg. However, space junk is weighed in tons. How many tons are there in 50,000 kg?
- The circle weighs 20% of what all the objects weigh together.
- The square weighs 5 tons less than the circle.
- If you have calculated what the circle, the square and the rectangle weigh, and carefully solved all the clues, you can work out what the triangle weighs!
- The total weight of all four objects is the same weight as ten Asian elephants. The rectangle weighs as much as four Asian elephants.

Answer The objects weigh this much:	The circle weighs ____tons.	The triangle weighs tons.
	The square weighs ____tons.	The rectangle weighs tons.

