Command	Argument
Forward	Number of steps

Number	Commands
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

1, how heavy is our payload?

Fill in the gaps on the right, and then use a calculator to work out the total weight in the cyan box.

Payload part	***Weight***
Raspberry Pi	31g
Fuel cell	
Fuel cell controller	60g
Mounting plate	
Camera	3g
Balloon	
Extra lift	100g
Total weight	g

2, how much Hydrogen do we need?

$$Volume = \frac{Total\ weight}{Lift\ of\ hydrogen}$$

$$Volume = \frac{\quad}{1200}$$

$$Volume = \quad m^3$$

3, how big will the balloon be?

The volume of the balloon is how big it is.

$$Volume = \frac{4}{3} \times \pi \times r^3$$

which is the same as

$$Volume = 4.2 \times r \times r \times r$$

Write 3 guesses for r in the blue boxes.
Use metres for your guesses.

r	***r x r x r***	***Volume***

Which is the volume that is closest to the one we found in the yellow box?

Write the radius for the volume in the green box.