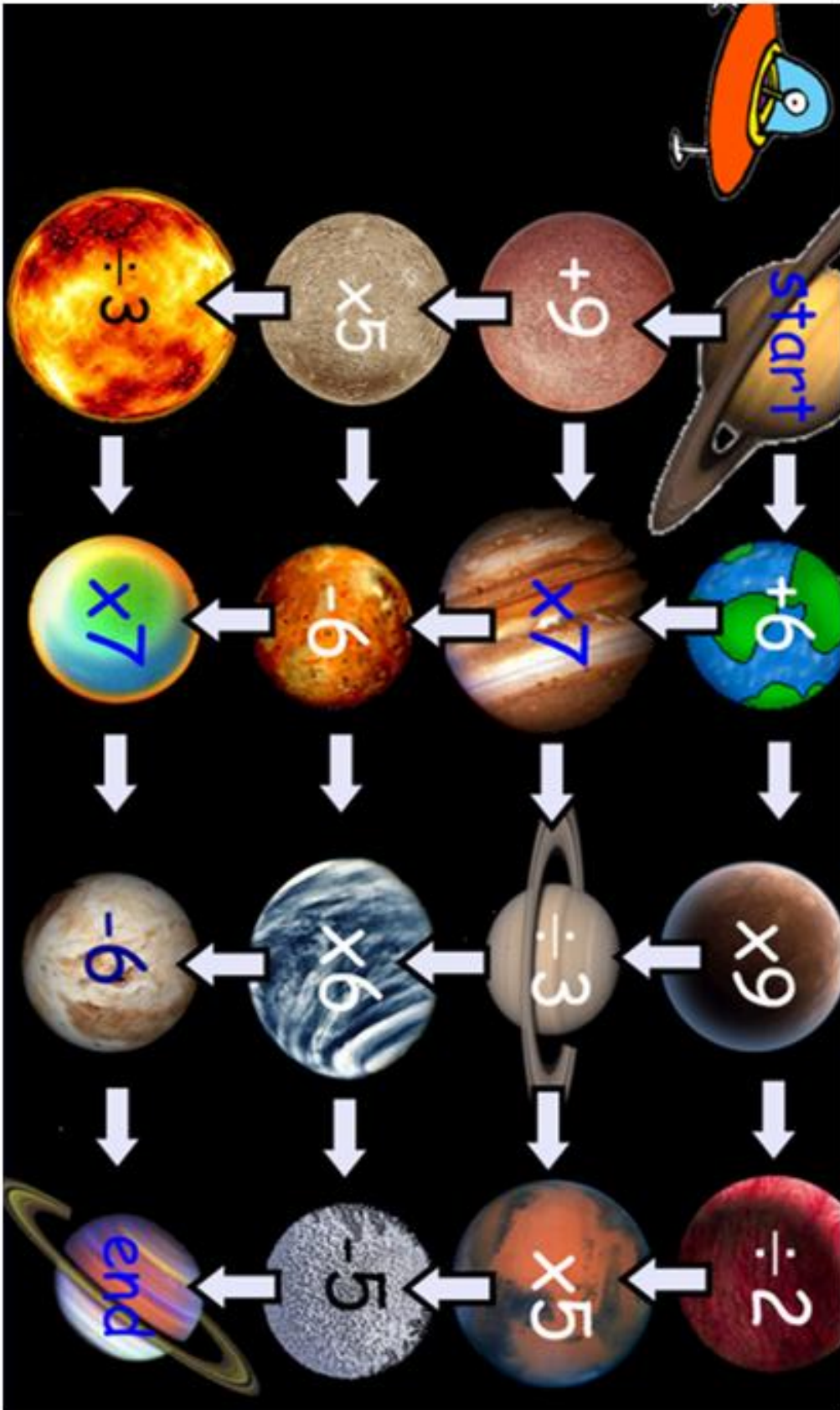


Maths

Task 1: The Planet Game

Solar system maths!
You need to get from one planet to the other...



Find a route from 'start' to 'end' that totals exactly 100

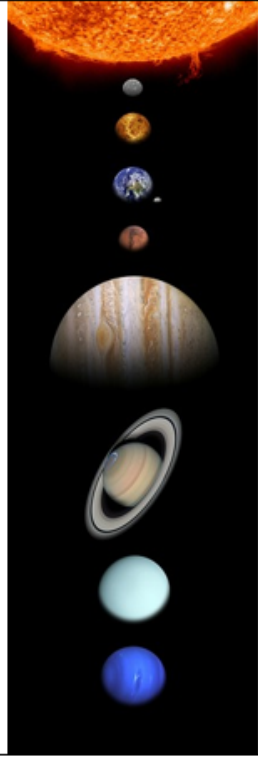
Which route has the highest total?

Which route has the lowest total?

Task 2: The Temperature Challenge

Can you make a thermometer to show the temperature for each planet?

1.

	Planets	Temperatures
	Mercury	70 °C
	Venus	60 °C
	Earth	10 °C
	Mars	-60 °C
	Jupiter	-70°C
	Saturn	-80 °
	Uranus	-100°C
	Neptune	-90°C

2.

	Planets	Temperatures
	Mercury	470 °C
	Venus	460 °C
	Earth	10 °C
	Mars	-60 °C
	Jupiter	-140°C
	Saturn	-180 °
	Uranus	-230°C
	Neptune	-220°C

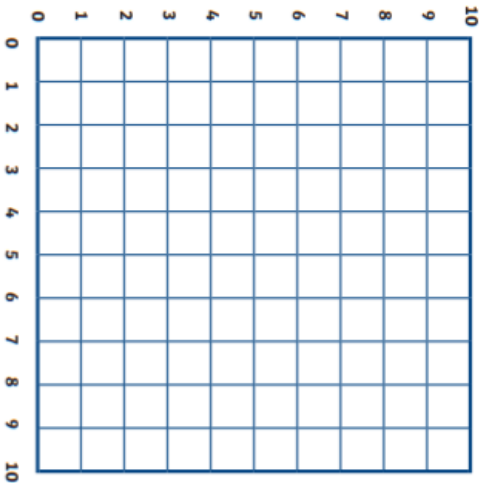
Task 3: Space Challenge

Constellation

Make a grid with the numbers 1 - 10 across the bottom and up the side (see right). Plot out the coordinates to reveal the constellation.

Can you give the constellation a name?

- (1,7) (1,3) (3,2) (5,2)
- (7,2) (9,3) (9,7) (8,5)
- (7,6) (6,5) (5,8) (4,5)
- (3,6) (2,5)

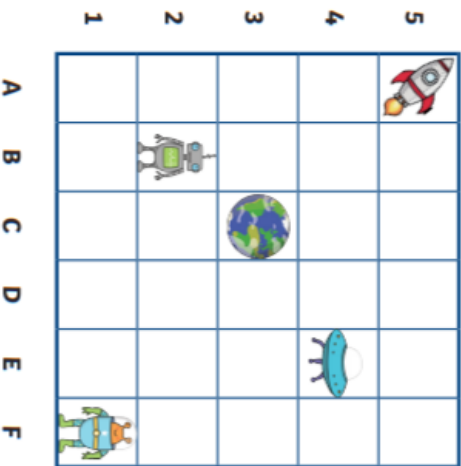


Space Challenge Card #1

In the Zone

This is a map of zone 2B. Can you write the location of the following:

- rocket
- planet
- robot
- alien
- spaceship

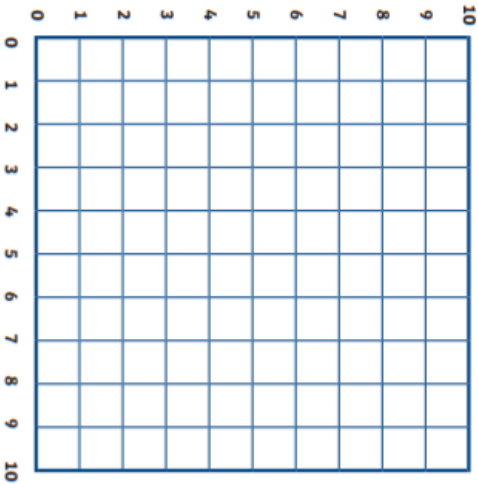


Space Challenge Card #3

New Constellation

Make a grid with the numbers 1 - 10 across the bottom and up the side (see below).

Draw the new constellation on your grid and then write out the coordinates.



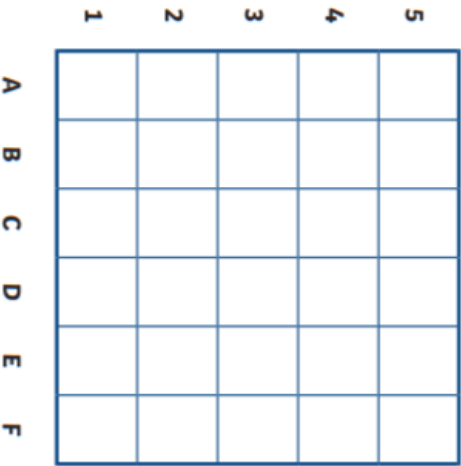
Space Challenge Card #2

In the Zone

You have been exploring zone 3A. Make a grid with the letters:

- A - F across the bottom.
- 1 - 5 up the side (see example).

Draw the things you find and write down their location.



Space Challenge Card #4

Task 4:

The Temperature Challenge

Follow the clues to find out the average distance from the Earth to the moon: □□□ □□□km.	The moon is less than $\frac{1}{2}$ million km away from the Earth.
Five of the six digits are factors of 24.	The first and the last digit have a product of 27.
The total of all 6 digits is 27.	The second and third digits have a difference of 4.
The sum of the first two digits is the same as the sum of the last two digits.	The middle two digits have a product of 4.

Task 5:

Space word problems

1. If 24 space suits fit into each box, how many boxes will be needed for 1200 suits?
2. Jim floats 50 times to and from the end of the space ship every day to stay fit. If the mission lasts through the whole of September, how many times would he travel the length of the ship?
3. 62,386 spectators watched Apollo 9 take off. How many watched Apollo 10 if there were 649 fewer people there?
4. 260 aliens watched the space rocket approaching their planet. Two fifths of the aliens were green. The rest were red. How many were red?
5. During one week, 257 space travellers arrived at the space hotel and 149 departed. At the end of the week, there were 2415 travellers at the space hotel. How many had there been at the start of the week?
6. There were 342 passengers on a flight from Mercury to Mars via Earth. At the Earth Station, 153 passengers got off and 79 new passengers got on. How many people flew on towards Mars?
7. There are 4 study rooms on every floor of the Space Station. Each study room has 20 work stations. A new station is being built with 560 work stations. How many floors does this space station have?
8. An annoying alien from Pluto wants to know- how many seconds are there in five Earth hours?
9. The hydroponics room had 8 trays with 24 cabbage plants growing in each tray. There were a further 6 trays which had 30 lettuce plants in each one. 243 plants were used during one week in order to make meals for the crew. How many plants were left?
10. If 120 space rivets fit in a packet, how many packets would 3,000 rivets fill?

ANSWERS

1. If 24 space suits fit into each box, how many boxes will be needed for 1200 suits? **50 boxes**
2. Jim floats 50 times to and from the end of the space ship every day to stay fit. If the mission lasts through the whole of September, how many times would he travel the length of the ship? **3000 times**
3. 62,386 spectators watched Apollo 9 take off. How many watched Apollo 10 if there were 649 fewer people there? **61,737 people**
4. 260 aliens watched the space rocket approaching their planet. Two fifths of the aliens were green. The rest were red. How many were red? **156 aliens were red**
5. During one week, 257 space travellers arrived at the space hotel and 149 departed. At the end of the week, there were 2415 travellers at the space hotel. How many had there been at the start of the week? **2307 travellers**
6. There were 342 passengers on a flight from Mercury to Mars via Earth. At the Earth Station, 153 passengers got off and 79 new passengers got on. How many people flew on towards Mars? **268 passengers flew on**
7. There are 4 study rooms on every floor of the Space Station. Each study room has 20 work stations. A new station is being built with 560 work stations. How many floors does this space station have? **7 floors**
8. An annoying alien from Pluto wants to know- how many seconds are there in five Earth hours? **18,000 seconds**
9. The hydroponics room had 8 trays with 24 cabbage plants growing in each tray. There were a further 6 trays which had 30 lettuce plants in each one. 243 plants were used during one week in order to make meals for the crew. How many plants were left? **129 plants were left**
10. If 120 space rivets fit in a packet, how many packets would 3,000 rivets fill? **25**