



# Maths

## Addition and Subtraction

# Need a coherently planned sequence of lessons to complement this resource?

**Lesson Breakdown**

Below is our suggestion for the most coherent and progressive sequence to teach this area of Planit Maths steps on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in

**Recall and Use Facts (1): Number Facts up to 10**  
This computer game themed lesson is designed to help children secure enable mysterious eggs to hatch and grow into magical creatures. They number pairs. Children use a range of methods to investigate and check presentation, differentiated activity sheets and mastery cards to help children.

**NC Statement:** Recall and use facts to 20 fluently and derive and use related facts up to 100.  
**Lesson Aim:** To recall and use number facts up to 10.

**Recall and Use Facts (2): Number Facts up to 20**  
This lesson teaches children to use familiar number facts to solve and create them calculate  $12 \div 3$  and  $13 \div 2$ . They can also apply this to numbers begin are encouraged to use different representations to support their learning. differentiated activity sheets and mastery cards to help children develop fluency.

**NC Statement:** Recall and use facts to 20 fluently and derive and use related facts up to 100.  
**Lesson Aim:** To recall and use number facts up to 20.

**Solve Problems (1): Using Different Representations to Solve Problems**  
Children learn to solve addition and subtraction problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods. This lesson includes Diving into Mastery activity cards with fluency, reasoning.

**NC Statement:** Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.  
**Lesson Aim:** To solve addition and subtraction problems using objects, pictures and models.

**Introduction**

In this unit, children will learn to recall and use addition and subtraction facts. They use a variety of different models, images and equipment to build their number sense, enabling them to use facts flexibly. They learn different strategies to help them add and subtract numbers efficiently, explaining their methods with concrete resources or jottings. Methods include: adding a unit to a ten; adding three single-digit numbers and adding and subtracting multiples of ten leading to pairs of two-digit numbers. They find the difference between numbers and reason about when it is quicker to find the difference or take away. They build up their understanding of commutativity and inverse relationships, using these to solve increasingly complex missing number problems. They apply their learning to problem-solving, and are able to ask questions, explain their choices and demonstrate their methods.

**Resources**

In addition to your standard maths resources, you will need:

- digital cameras

**Assessment Statements**

By the end of this unit:

children working towards the expected level will be able to:

- recall and use at least four out of six number facts to ten and derive their associated subtraction facts;
- add and subtract: two-digit numbers and ones, and two-digit numbers and tens, where no regrouping is required;
- explain their addition and subtraction methods verbally, in pictures or using apparatus;
- understand that two numbers can be added in any order and the answer will be the same.

children working at the expected level will be able to:

- recall number facts to and within ten and subtraction facts. Use these to derive numbers and within 20 and 100;
- add and subtract within 100: a two-digit number and ones, a two-digit number and tens, two two-digit numbers;
- add three one-digit numbers using efficient methods;
- understand that addition is commutative and subtraction is not, and explain what this means;
- use the inverse relationship between addition and subtraction to solve problems and check calculations;
- solve addition and subtraction problems in context of quantities and measures, using pictures and mentally.

**Addition and Subtraction**

Maths | Year 2 | Steps to Progression Overview

The aim of this overview is to support teachers using Planit Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within Planit Maths. Wherever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

**Yearly Overview**

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number: Addition and Subtraction					Measurement: Money		Number: Multiplication and Division		
Spring	Number: Multiplication and Division		Statistics		Geometry: Properties of Shape			Number: Fractions				
Summer	Position and Direction		Problem Solving and Efficient Methods		Measurement: Time		Measurement: Mass, Capacity and Temperature		Measurement: Length and Height		Investigations	

See our [Addition and Subtraction Steps to Progression](#) document.

Twinkl Planit is our award-winning scheme of work with over 4000 resources.



# Add and Subtract 9



twinkl

# Aim

- To add and subtract 9 from any 2-digit number.

# Success Criteria

- I can add 9.
- I can subtract 9.
- I can spot a pattern.
- I can explain the pattern and use it to help me.

# Remember It



Turn over 2 cards and make a 2-digit number.

Add 10 to your number. Subtract 10 from your number.

Write a calculation each time.

Repeat a few times.



I made 74.

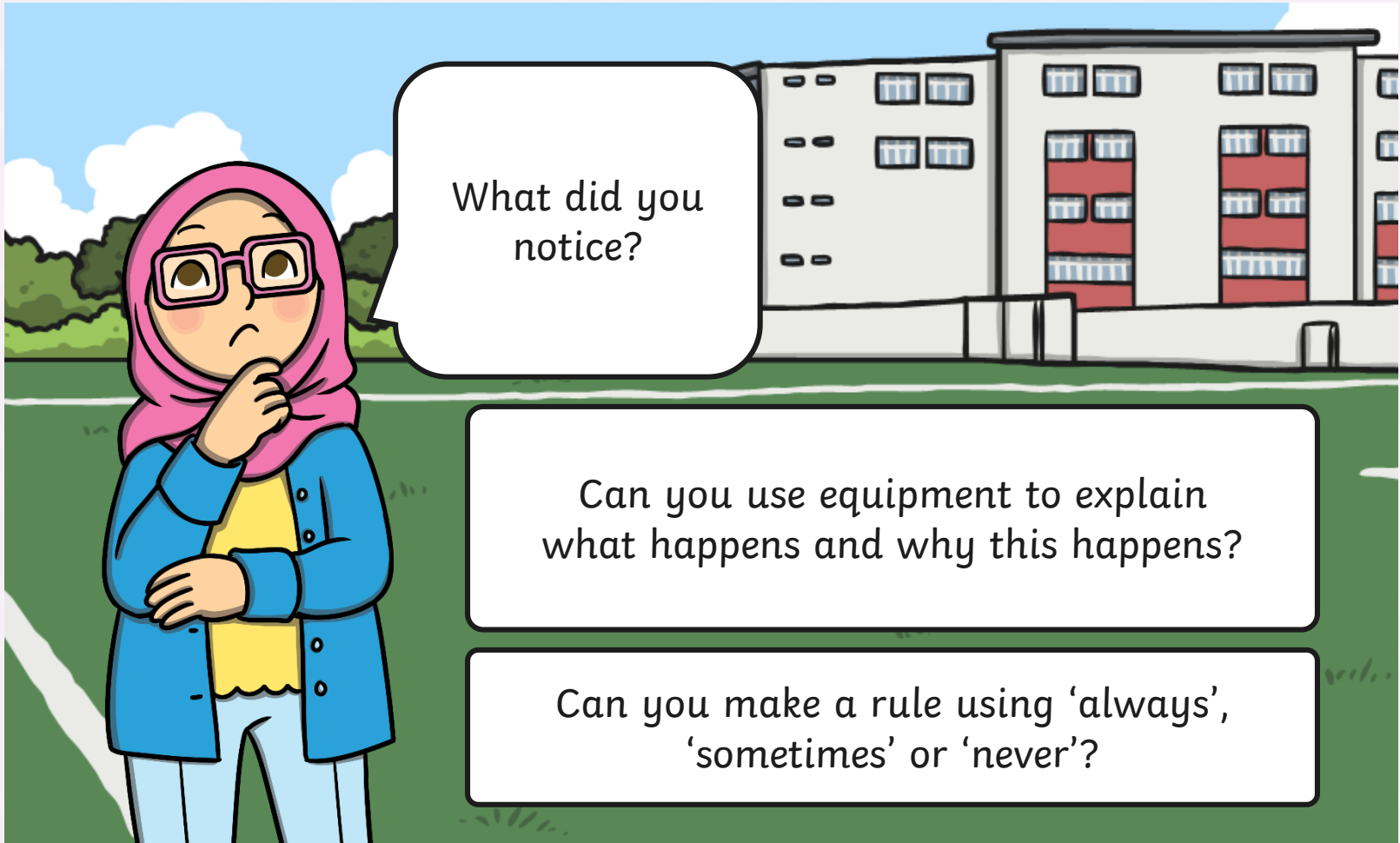
7

4

$$74 + 10 = 84$$

$$74 - 10 = 64$$

# Remember It



What did you notice?

Can you use equipment to explain what happens and why this happens?

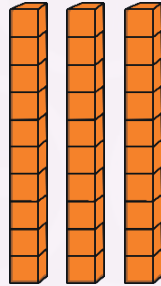
Can you make a rule using 'always', 'sometimes' or 'never'?

# Adding Ten



$$21 + 10 = 31$$

Tens



3

Ones



1

What happened to the tens column? What happened to the ones column? Why did this happen?

# Adding Nine



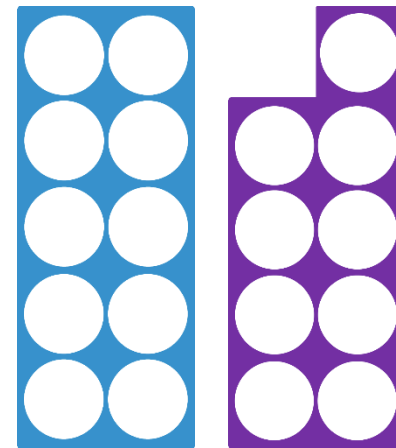
What do you think will happen when we add 9?

Compare 9 to 10.

What do you notice?



I can see that 9 is one less than 10, but how will that help me add 9?





# Adding Nine



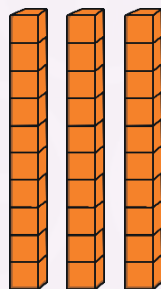
I need to add 9 so first I add 10.

$$23 + 9 = 32$$

9 is one less than 10 so now I need to take 1 away.

Tens

Ones



3



3

What happened in the tens column? What happened in the ones column? Why did this happen?

# Adding Nine

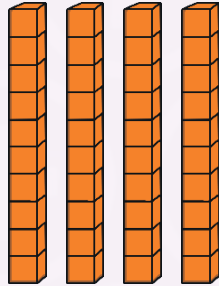


I need to add 9 so first I add 10.

$$35 + 9 = 44$$

Tens

Ones



4



5

9 is one less than 10 so now I need to take 1 away.

What happened in the tens column? What happened in the ones column? Why did this happen?

# Practise



Choose a colour and complete each calculation.

$24 + 9 = 33$

$22 + 9 = 31$

$9 + 9 = 18$

$34 + 9 = 43$

$23 + 9 = 32$

$18 + 9 = 27$

$44 + 9 = 53$

$24 + 9 = 33$

$27 + 9 = 36$

$54 + 9 = 63$

$25 + 9 = 34$

$36 + 9 = 45$

$64 + 9 = 73$

$26 + 9 = 35$

$45 + 9 = 54$

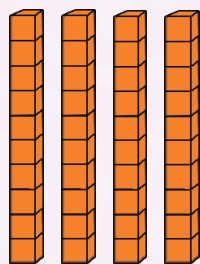
**What did you notice? Why does this happen?**

# Subtracting Ten



$$40 - 10 = 30$$

Tens



4

Ones

0

What happened to the tens column? What happened to the ones column? Why did this happen?

# Subtracting Nine

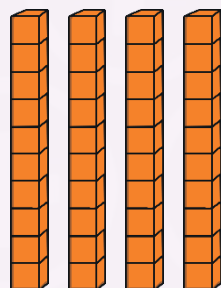


I need to subtract 9 so first I subtract 10.

$$45 - 9 = 36$$

I have taken away 1 too many so now I need to add one back on.

Tens



4

Ones



6

What happened in the tens column? What happened in the ones column? Why did this happen?

# Subtracting Nine



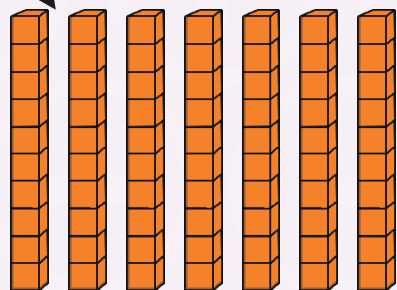
I need to subtract 9 so first I subtract 10.

$$74 - 9 = 65$$

I have taken away 1 too many so now I need to add one back on.

Tens

Ones



7



5

What happened in the tens column? What happened in the ones column? Why did this happen?

# Space Race

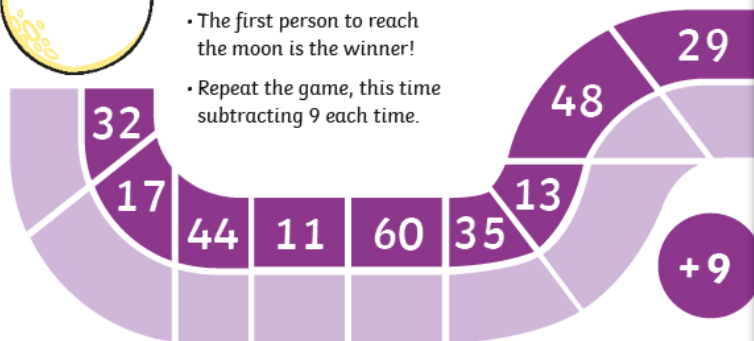


## Adding and Subtracting 9 Space

### Adding and Subtracting 9 Space



- Spin the spinner and move your counter that number of p. Add 9 to the number you land on. Use equipment to explain thinking to your partner.
- The first person to reach the moon is the winner!
- Repeat the game, this time subtracting 9 each time.



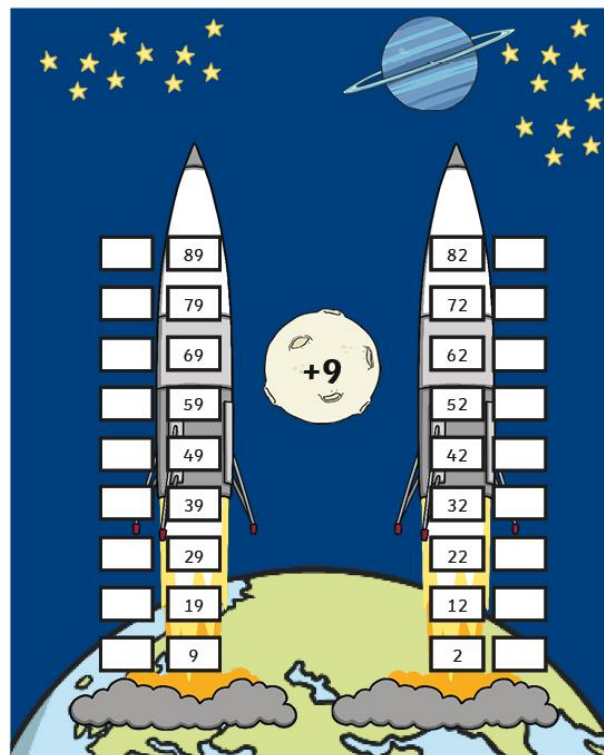
START

34 15 21 46 53 31

## Race to Space

### How to

- Each p move t
- Add 9
- The fir
- Now, a
- Discus
- Use eq



## Diving into Mastery

Dive in by completing your own activity!



**Add and Subtract 9**

Start on 0. Keep adding 9 to get home.

0 19 36 47  
9 27 45 56  
17 18 38 54

Draw a line to show the way. 63

Keep subtracting 9 to blast off.

90	81	72	63	54
45				

TOP TIP: Take away 10 then add 1.

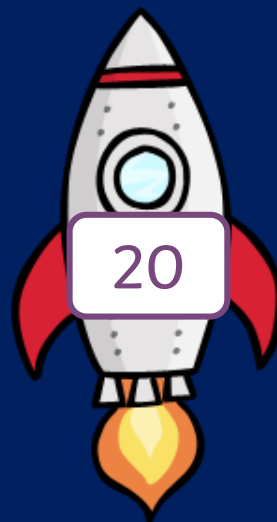
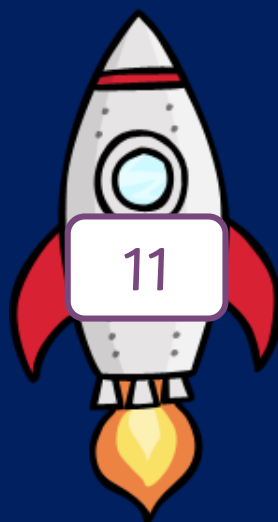
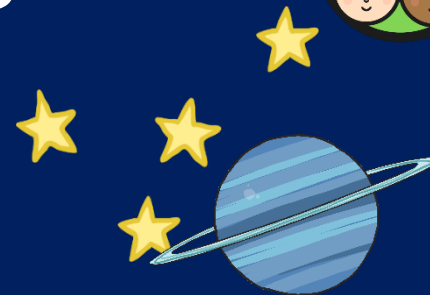




# Space Spotting



Do the numbers differ by 9?  
Explain how you know.

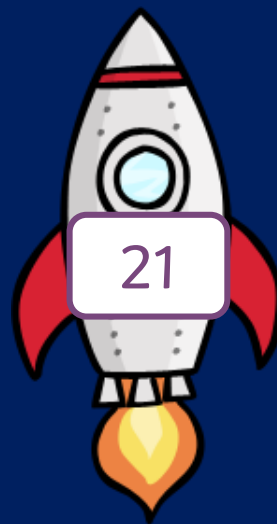
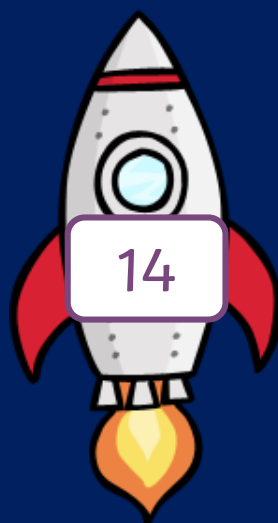
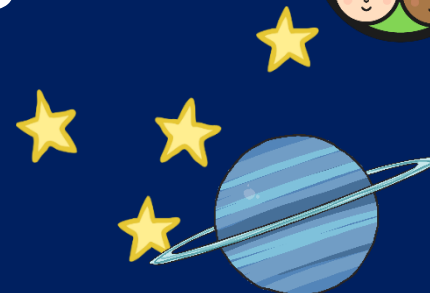




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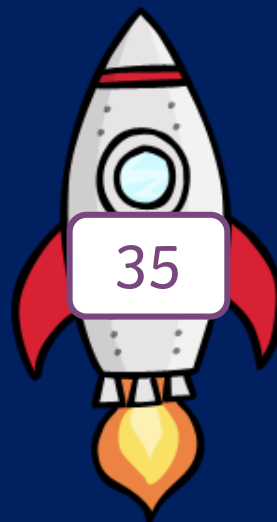
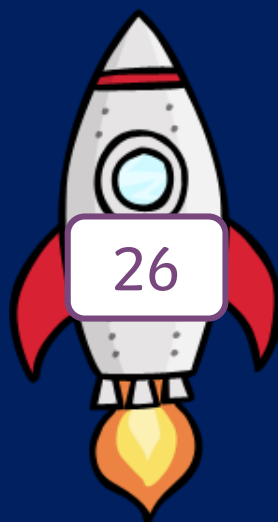
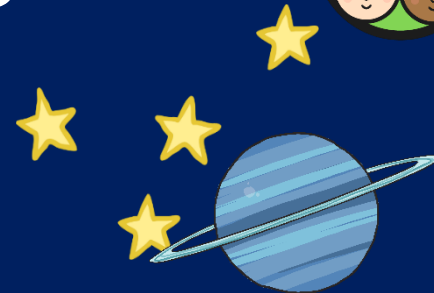




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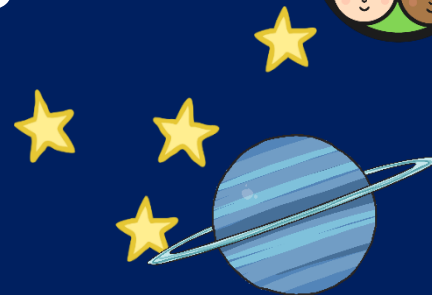




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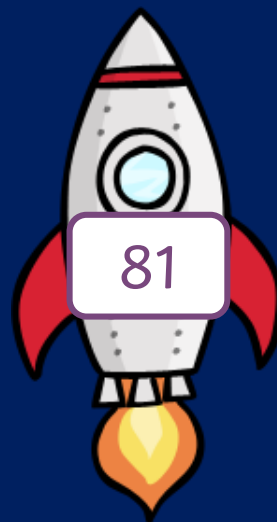
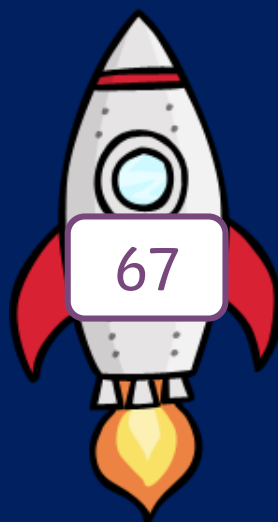
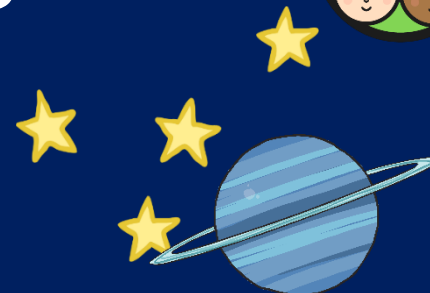




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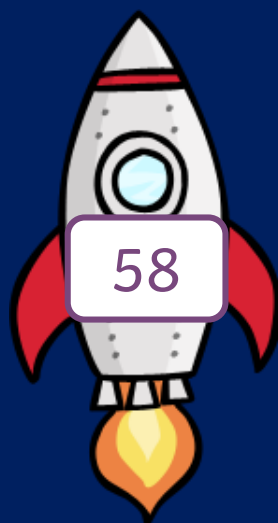
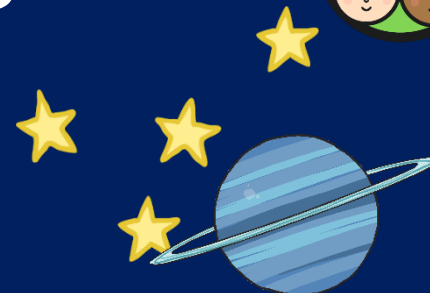




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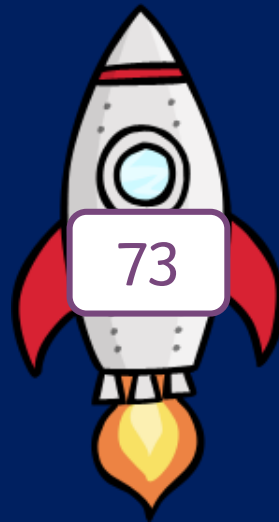
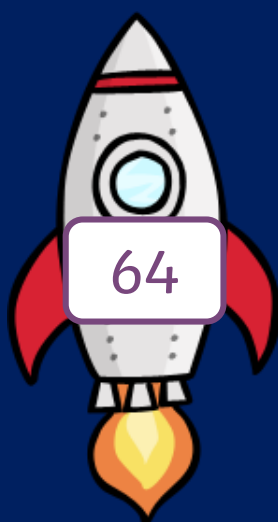
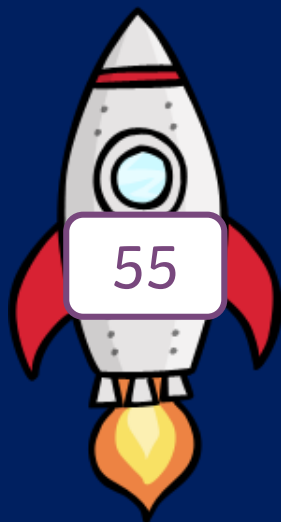
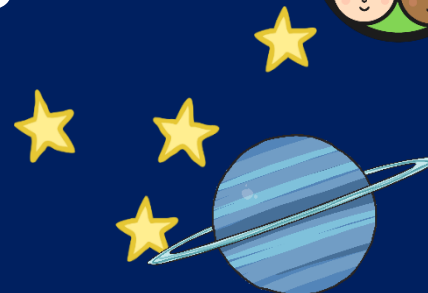




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