Monday 2nd February
Morning Challenge

1. 4,726 + 3,859 =
2. 9,004 − 3,678 =
3. 384 × 7 =
4. 6,048 ÷ 6 =
5. 45 × 23 =
6. 7,200 ÷ 9 =
7. 3.6 + 4.85 =
8. 12 − 3.47 =
9. 0.8 × 0.6 =
10. 5.4 ÷ 0.3 =

02.02.26

×	1	2	3	4	5	6	7	8	9	10	11	12
1												
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12												

02.02.26

TBAT: Identify common factors and common multiples

3 in 3

Daily 10 - Mental Maths Challenge - Topmarks

1. 5989 x 17 =

2. 288 ÷ 18 =

3. Sam has 1,234,346 pieces of Lego. He uses 345,920 pieces to build a stadium and 45,987 pieces of Lego to build a park. How many pieces has he used? How many pieces does he have left?

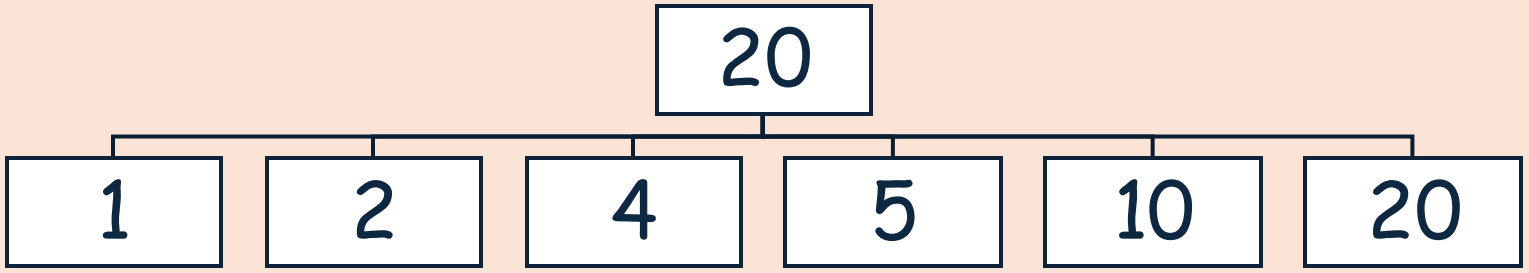
Challenge – 20 is the answer. What is the question? (It must include a fraction, decimal or percentage)

02.02.26

TBAT: Identify common factors and common multiples

A factor of a number is any amount that divides into that number exactly, leaving no remainder.

For example, 6 is a factor of 30 because it goes in 5 times (6 x 5= 30)



We can write factors like this:

1, 2, 4, 5, 10, 20

Or as factor pairs:
1 x 20, 2 x 10, 4 x 5

Highest common factor:

20: 1, 2, 4, 5, 10, 20

24: 1, 2, 3, 4, 6, 8, 12, 24

How many factor pairs can you think of for 24?

How many factor pairs can you think of for 36?

What is the highest common factor?

02.02.26

TBAT: Identify common factors and common multiples

Partner discussion -

Use your knowledge of factors to answer this question.

There are 49 pears and 56 oranges.

They need to be put into baskets of pears and baskets of oranges with an equal number of fruit in each basket.

Amir says,

There will be 8 pieces of fruit in each basket.

Jack says,

There will be 7 pieces of fruit in each basket.

Who is correct? Explain how you know.

Tommy has two pieces of string.

One is 160 cm long and the other is 200 cm long.

He cuts them into pieces of equal length.

What are the possible lengths the pieces of string could be?

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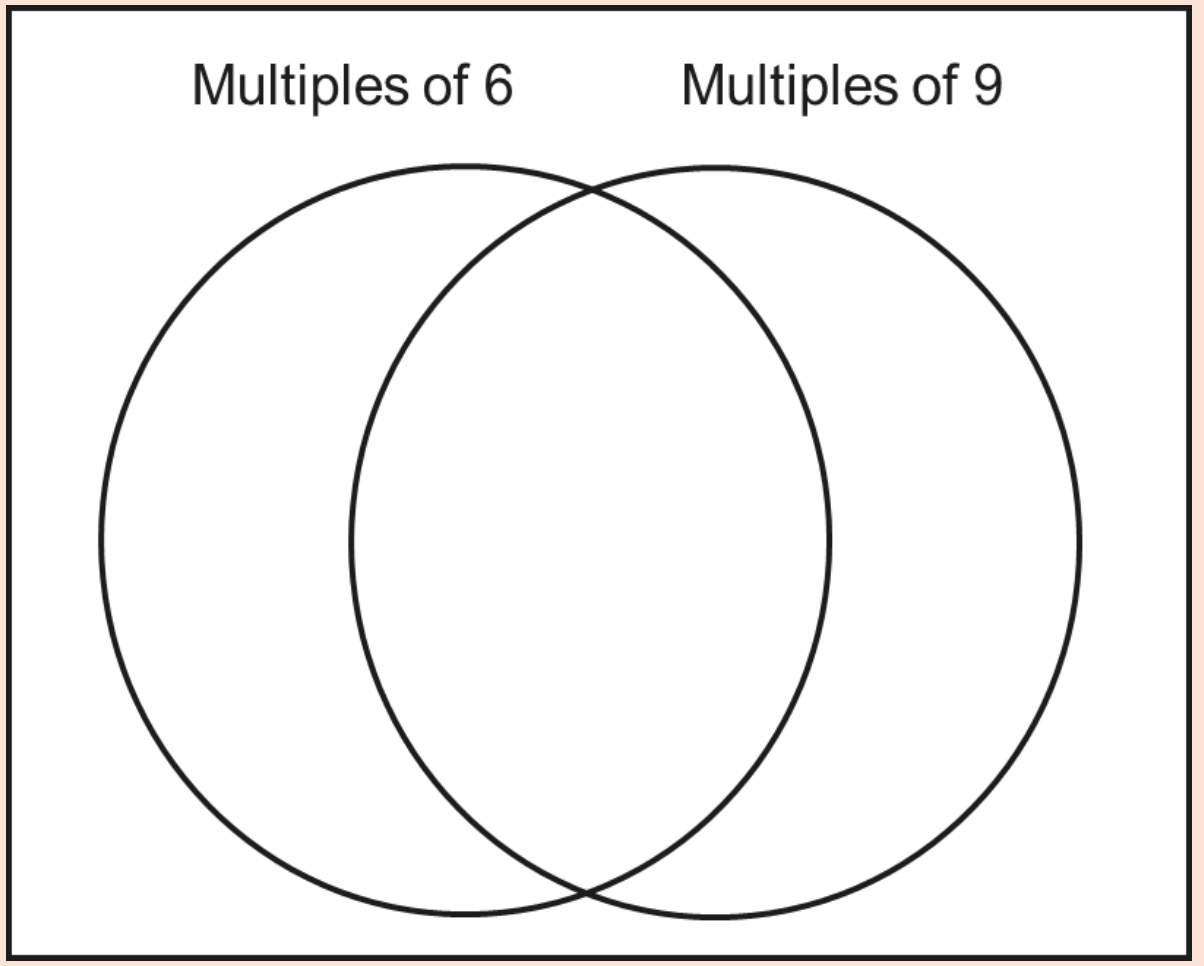
TBAT: Identify common factors and common multiples

Draw the Venn diagram and write the numbers in the correct places.

6	9	18
36	45	48
54	72	84
108	122	126



What are the common multiples of 6 and 9?

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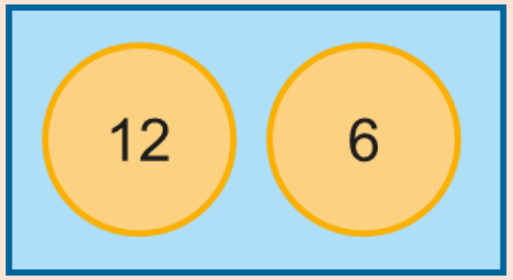
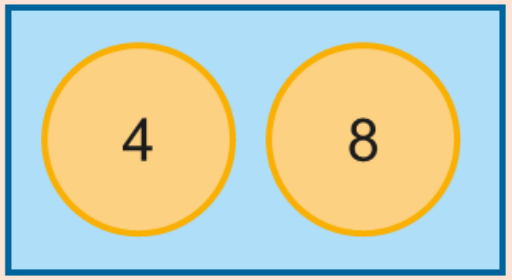
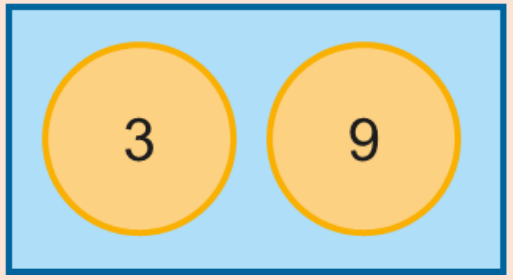
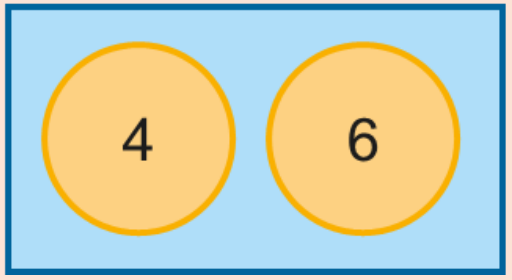
TBAT: Identify common factors and common multiples

Give the first three common multiples for each pair of numbers.









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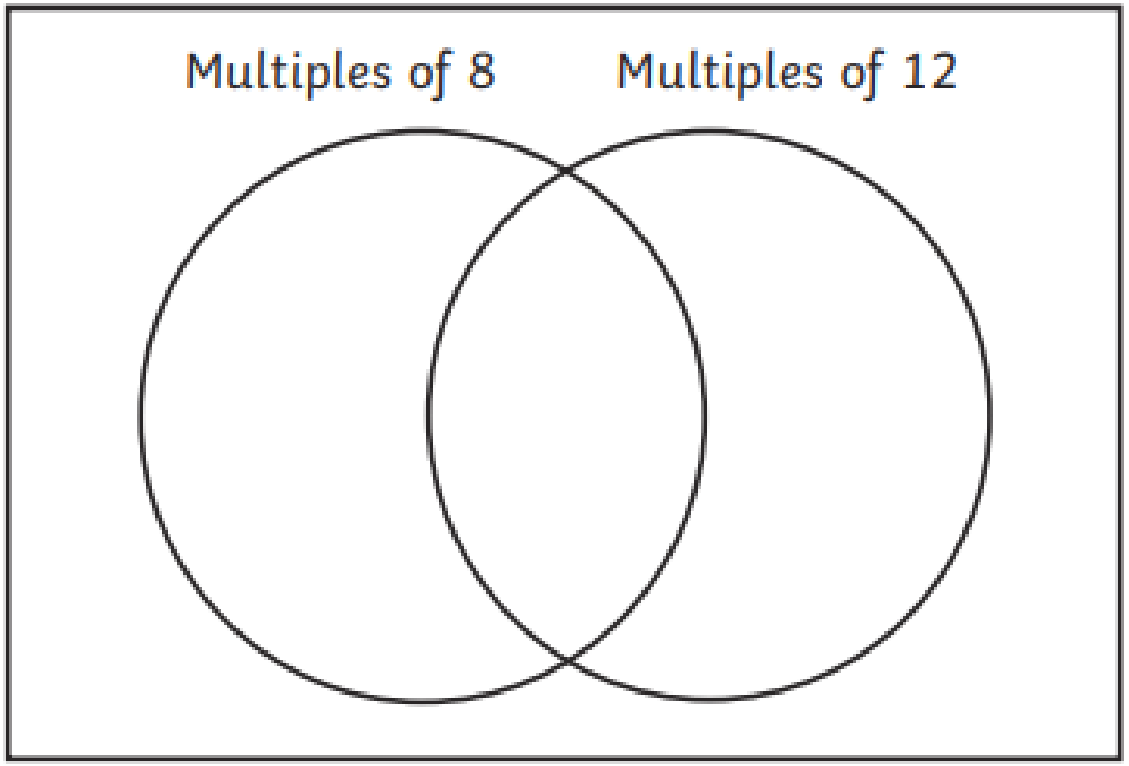
TBAT: Identify common factors and common multiples.

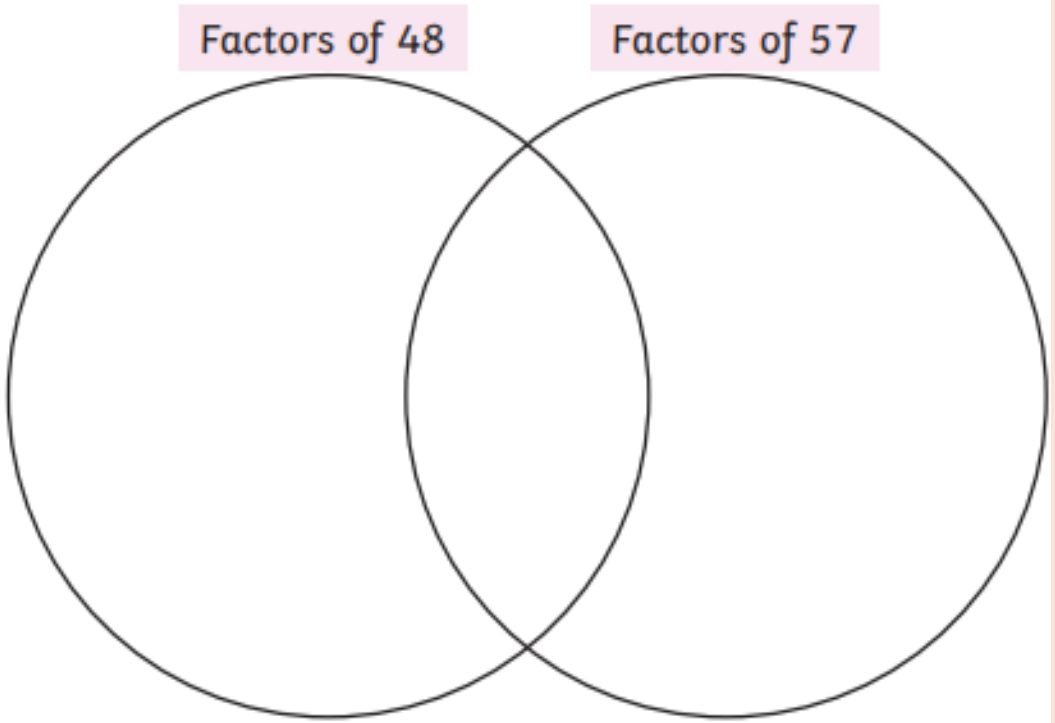
1. Sort the numbers into this Venn diagram.

7	12	16	24	32
36	48	72	54	120



2. Sort the numbers into the correct places on the Venn diagram.

1	2	3	4
6	8	12	16
19	24	48	57



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TBAT: Identify common factors and common multiples.

Challenge

Is Elena's statement true or false?
Prove it.

Elena

The first three common multiples of 6 and 9 are 18, 54 and 72.

Mastery Challenge

Zeke and Abi are explaining how to find common multiples of 3 and 6.
Whose statement is correct? Explain your reasoning.

Zeke

I multiplied 3 and 6 together to get 18 and then I added 18 over and over again.

I listed the multiples of 3 and the multiples of 6 and found the numbers that are in both lists.

Abi

Mastery with Greater Depth

1) Felix has two pieces of ribbon. One is 180cm long and the other is 240cm long. He needs to cut both ribbons into equal-sized pieces, longer than 10cm, without any left over.

a) Find all possible lengths of ribbon he could cut where the lengths are whole centimetres.

b) Explain why he would not be able to cut the ribbons into lengths of 40cm.

Monday 2nd February

TBAT: words with a long /e/ sound spelt ‘ie’ or ‘ei’ after c

deceive
conceive
receive
perceive
ceiling
receipt
protein
caffeine
seize
neither

Challenge – Write a sentence including a spelling in the past progressive tense.

Monday 2nd January

TBAT: explain the meaning of words in context.

3 in 3

There are moments in history when the future of a whole nation hangs in the balance. Just such a moment happened in 1940 when Britain stood alone against the might of Nazi Germany under its leader Adolf Hitler. Hitler never really wanted to invade Britain, but heal so could not afford to leave it alone, so he ordered his air force, the Luftwaffe, to destroy the Royal Air Force (RAF). This would make it much easier for his armies to cross the English Channel and take over the whole country. He hadn't counted on the bravery and determination of the young fighter pilots from Britain and her allies to beat back the massed attacks by the German aircraft.

1. **...*Britain stood alone against the might of Nazi Germany*...**

What does the word 'might' mean in this context? Tick one.

strength *leader* *possibility* *flight*

2. The text says that Hitler did not want to invade Britain, so why did he order his air force to attack?

3. Find and copy one word in the last sentence that means friends or partners.

Monday 2nd January

TBAT: explain the meaning of words in context.

Words we will find in the text:

- **Mischief -** Playful trouble or naughty behaviour that isn't meant to be serious or harmful.

- **Forbidden -** Not allowed because of rules or laws.

- **Rebellious -** Someone who likes to break rules or refuses to do what they are told.

- **Impulsive / Impulsiveness -** Acting quickly without stopping to think about what might happen next.

Monday 2nd January

TBAT: explain the meaning of words in context.

Multiple Choice

1. Where does Lyra often spend her time around Jordan College?

A. Sitting quietly in classrooms
B. Exploring the library
C. Running through halls and across rooftops
D. Playing in the gardens

2. What does the author suggest about Lyra by describing her clothes as "creased or dusty"?

A. She does not care about her appearance at all
B. She spends a lot of time outdoors and adventuring
C. She is poor and cannot afford new clothes
D. She is trying to impress the adults around her

Monday 2nd January

TBAT: explain the meaning of words in context.

Retrieval

1. Find and copy one phrase that shows Lyra treats Jordan College like a playground.
2. What two details about Lyra's appearance suggest she spends a lot of time exploring rather than being indoors?
3. According to the text, how does Lyra usually solve problems or deal with challenges?
4. How does Pantalaimon behave differently from Lyra when she faces new adventures?

Challenge - What two pieces of information show that Lyra is intelligent even though she dislikes lessons?

Monday 2nd January

TBAT: explain the meaning of words in context.

Words in Context

1. In the sentence *"Lyra behaves as though the ancient building is her own personal playground"*, what does the word *ancient* suggest about Jordan College?

2. In the phrase *"rough and ready look"*, what does this suggest about Lyra's appearance and lifestyle?

3. The text says Lyra often *relies on her wits*. What does *wits* mean in this sentence?

4. At the end of the text, Lyra is described as *"unknowingly"* stepping into a bigger world. What does *unknowingly* tell you about her understanding of what lies ahead?

Challenge - The text describes Lyra as having a *"rebellious exterior."*
What does the word rebellious suggest about how Lyra behaves, based on the text?

Mastery - (3 marks)

At the end of the text, Lyra is described as *"a tornado of energy and curiosity."*
Explain what this phrase suggests about Lyra's character. Use evidence from the text to support your answer.

Monday 2nd February

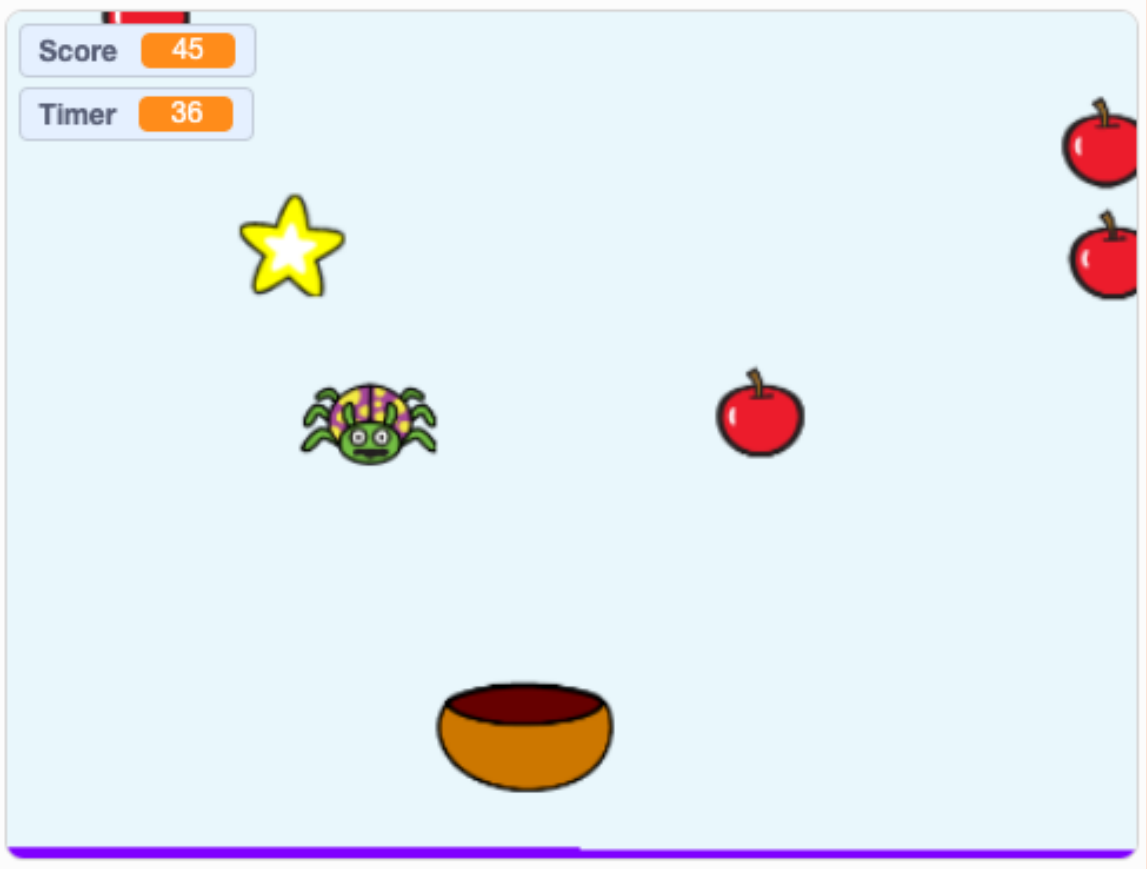
TBAT: design a project that builds on a given example.

- I can choose the artwork for my project
- I can create algorithms for my project
- I can explain my design choices

Explore this game:
ncce.io/introfruit

1. How do you play the game?
2. How many sprites are there?
3. What do the sprites do?
4. Do the sprites all fall at the same speed?
5. How do you know how well you have done?

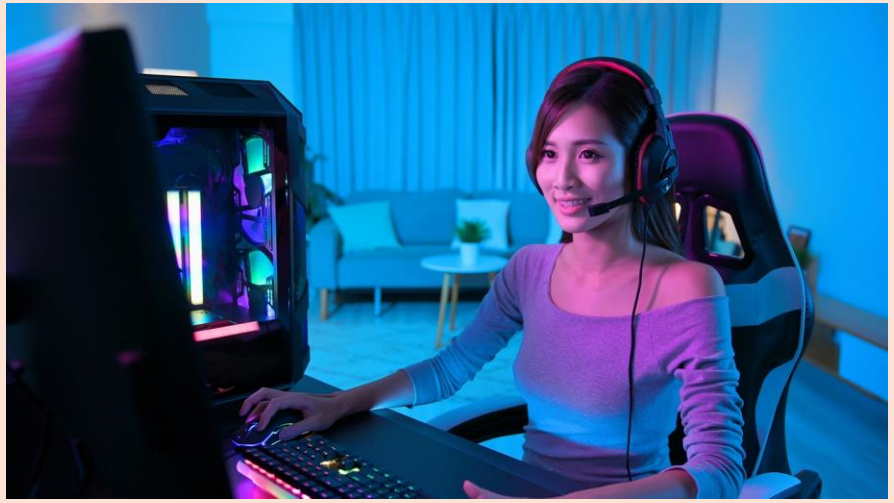
Think, pair, share



Thinking like a games designer

Games designers work in a team and come up with ideas, decide rules and work on the look and playability of a game. Many new games fit existing genres – action, shooter, role playing or adventure.

Games designers combine their own ideas with elements from games that enjoy or are already popular or familiar. They might suggest the setting, characters, and graphics and balance the rules for scoring or losing lives to make it more fun or challenging.



Over the next few lessons, you will become a **games designer** and create a project for your new game.

Task: Create a ‘catching’ game that includes a score and at least three falling objects. The objects should fall at different speeds.

In this version, the apples and the spider have been removed.

ncce.io/fruitcatcher

This will be the basis for your game.

Choose your artwork

Planning is an important stage of **game design**:

- Choose two more sprites to fall
- Choose one background

Only complete the first section of the worksheet. You will complete the rest of the worksheet in the next activity.

Sprite 1 **Name:** Falling star 	**Sprite 2** **Name:**	**Sprite 3:** **Name:**
Background:		

Design your algorithms

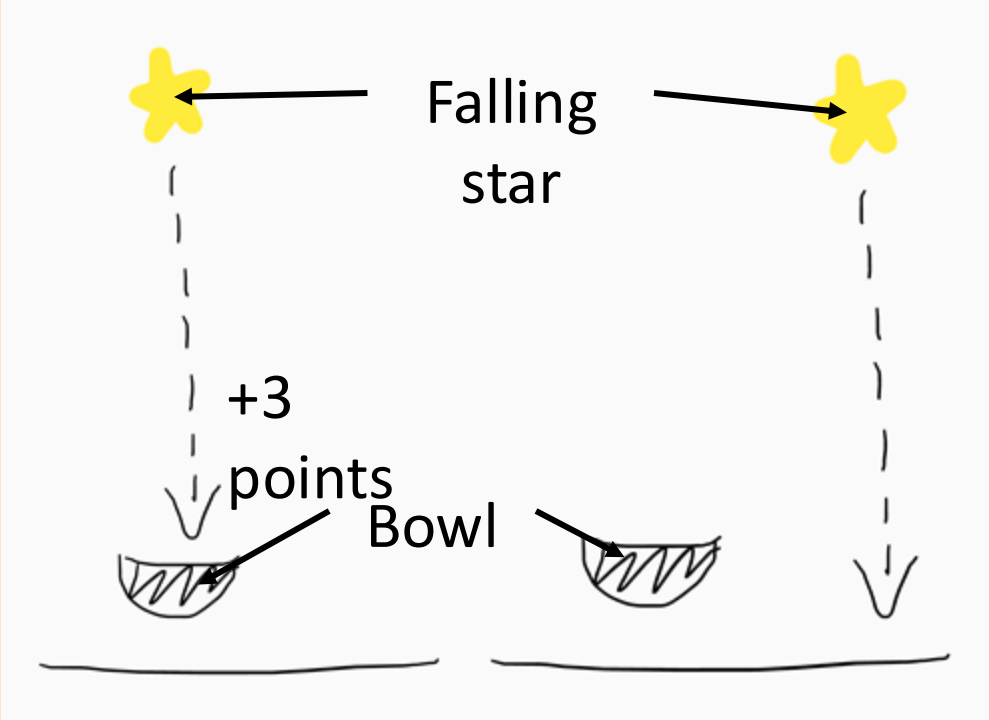
An algorithm is a precise sequence of instructions, or set of rules, for performing a task.

Algorithm for the falling star

The falling star moves down by eight from a random x position at the top of the screen.

If the sprite falls onto the bowl, change the score by three. It falls again from a random x position at the top of the screen.

If the falling star touches the screen bottom, it falls again from a random x position at the top of the screen.



Design your algorithms

Add algorithms for the two new sprites to the design template. Each algorithm should include a **drawing** and a **description**.

Game design suggestions:

- Each sprite should change the score by a different amount (you could use a negative number)
- Each sprite can move at a different speed
- Sprites can be different sizes

Make sure that any design choices are included in your algorithms.

Monday 2nd February

Dance

To develop a dance phrase using actions, dynamics, space and relationships.

Success Criteria

- Dance movements are clear and in time with the beat of the music.
- Use strong, confident actions.