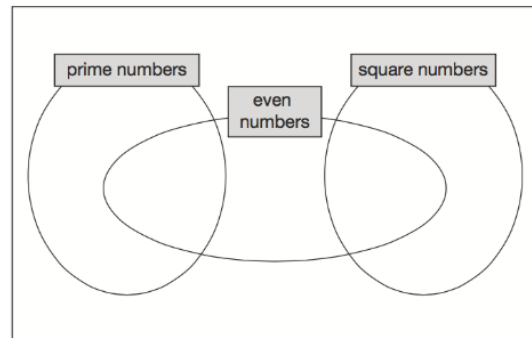


# Using Discovery Education Espresso to prepare for KS2 SATs: Mathematics (Reasoning)

5 Write each number in its correct place on the diagram.

16      17      18      19

2 marks



## 1. ACTIVATE PRIOR LEARNING



Simple instructional strategies that incorporate digital media in meaningful, effective, and practical ways.

### Quick writes

Preparation time: Low      Ages: Primary & Secondary      Media type used: Video



Often, the sight of a blank white page is daunting to students who are not confident in their writing abilities. Quick writes are a simple literacy strategy used to develop writing fluency, build the habit of reflection into a learning experience, and informally assess student thinking. The purpose of the activity is for students to quickly formulate thoughts, ideas, and/or hypotheses without worrying about the element of structure.

Try the *Quick Write* strategy and give pupils one minute to write down as much as they can remember about different types of numbers.

[www.discoveryeducation.co.uk/sos](http://www.discoveryeducation.co.uk/sos) > Quick writes

## 2. READ AND SUMMARISE

### Number facts



<b>Multiples</b>	<p>A <b>multiple</b> is the result of multiplying one number by another. For example, 100 is a multiple of 7 because <math>7 \times 100 = 700</math>.</p> <p>Here are some other multiples:</p> <p>Multiples of 11: 11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121, 132</p> <p>Multiples of 12: 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144</p> <p>Multiples of 13: 13, 26, 39, 52, 65, 78, 91, 104, 117, 130, 143, 156</p> <p>Multiples are the same as the numbers appearing in the times tables. In this case the 11s, 12s and 13s tables.</p> <p>The first multiple of a number will always be the number itself. You can check if another number is a multiple of a number by seeing if it is possible to divide the smaller number evenly into the larger number, without leaving a remainder.</p> <p><b>Common multiples</b> are multiples common to more than one number.</p> <p>For example:</p> <p>Some of the multiples of 8 are 8, 16, 24 and 32.</p> <p>Some of the multiples of 12 are 12, 24, 36 and 48.</p> <p>So 24 is a common multiple of 8 and 12.</p> <p>Sometimes you might want to find the <b>lowest common multiple</b>. This is the smallest number that is a multiple of two or more numbers.</p>
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$$12 \times 1 = 12$$

$$12 \times 2 = 24$$

$$12 \times 3 = 36$$

Explore the fact-file in *the Number Facts* module at KS2 to revise knowledge of primes, factors, multiples, squares and cubes.

KS2 > Maths > Number facts (Upper) > Factfiles > Number facts

## 3. APPLY

Use the *Venn/Carroll Diagram builder* to create challenges for pupils. Ask them to sort a set of numbers, or suggest numbers which fit in each segment. Leave off the labels and get them to work out the sorting criteria, or sort some numbers incorrectly and ask them to spot the mistakes.

KS2 > Maths > Number facts (Upper) > Activities > Venn/Carroll diagram builder - Numbers

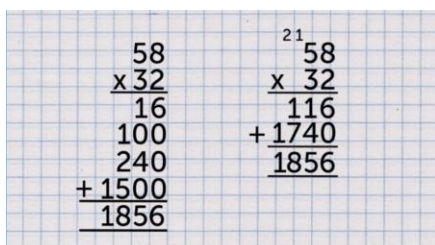
## Discovery Education Community tip

The Venn/Carroll diagrams you create can be printed off, to be used for written work or to take home as a revision tool.

# Using Discovery Education Espresso to prepare for KS2 SATs: Mathematics (Arithmetic)

<b>30</b>	$\begin{array}{r} 6574 \\ \times \quad 31 \\ \hline \end{array}$	<input style="width: 40px; height: 20px;" type="text"/> 2 marks
Show your method	<div style="border: 1px solid #0070c0; width: 100px; height: 40px; margin: 0 auto;"></div>	

## 1. WATCH



This video describes both the expanded method and the long division method for multiplying two-digit numbers. Pause at appropriate moments and ask pupils to predict what the next step in the calculation could be, or to solve the problem on whiteboards. Try watching with no sound and ask them to explain what is happening at each step.

KS2 > Maths > Calculations (Upper) > Videos > Written calculations: long multiplication

## 2. APPLY



Simple instructional strategies that incorporate digital media in meaningful, effective, and practical ways.

### Paper slide

Preparation time: Low Ages: Early years, Primary & Secondary Media type used: Video

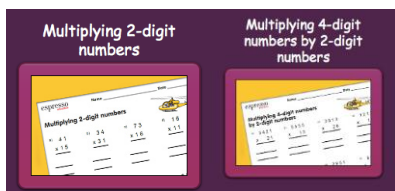


The purpose of this strategy is for students to explain a concept or synthesise knowledge and understanding in their own words through illustrations and simple animation. Restating is a valuable skill and different from memorising. It requires students to think more conceptually and internalise concepts and information helping synthesis of ideas. The paper slide activity incorporates both the visual and oral sequencing and relating of a story or concept, fostering collaboration.

Using the paper slide strategy, ask pupils to choose one of the methods and explain it themselves, showing how it could be applied to the sample question above.

[www.discoveryeducation.co.uk/sos](http://www.discoveryeducation.co.uk/sos) > Paper slide

## 3. PRACTICE



Use the printable resources in the module to practice and reinforce the chosen method. A range of difficulty levels can support differentiation.

KS2 > Maths > Calculations (Upper) > Printable resources

## Discovery Education Community tip

The video transcript includes a written explanation of both methods. Why not print this out and send home for parents, to help support revision at home?

# Using Discovery Education Espresso to prepare for KS2 SATs: Grammar and Punctuation

23

Tick one box in each row to show whether the commas are used correctly in the sentence.

Sentence	Commas used correctly	Commas used incorrectly
The blackbird, which nests in sheltered places, lays several eggs at a time.		
Her hobbies include walking, gardening, sewing and reading.		
My bag filled, with chocolates and sweets fell onto the floor.		
My case is heavy because I have shoes, clothes, books, and a gift, for my friend in it.		

1 mark

## 1. REFRESH PUPILS' KNOWLEDGE



Watch the videos in the *KS2 Grammar & punctuation* module to remind pupils of different reasons we use commas when writing.

KS2 > English > Grammar & punctuation

## 2. SUMMARISE KEY POINTS



Using a free web 2.0 tool such as *piktochart* ([www.piktochart.com](http://www.piktochart.com)) challenge pupils to make an infographic to explain the different ways commas can be used.

[www.piktochart.com](http://www.piktochart.com)

## 3. PUT SKILLS INTO CONTEXT



Explore the text extracts in the *Love Reading* module for KS2 to search for examples of commas being used in different ways. You could also try copying and pasting these texts into Word, and add or remove commas so pupils can practice identifying whether or not they've been used correctly.

KS2 > English > Love reading with Espresso

## Discovery Education Community tip

The snipping tool allows you to capture screen shots from Discovery Education videos and save them as still images, which can be imported into other software. Pupils could make their own revision document or infographic.

# Using Discovery Education Espresso to prepare for KS2 SATs: Reading

**33** Below are some summaries of different paragraphs from this text.  
Number them 1 – 6 to show the order in which they appear in the text.  
The first one has been done for you.

- |   |                                    |   |                          |
|---|------------------------------------|---|--------------------------|
| An important lesson is learnt.          | <input type="checkbox"/>           | New information is discovered about the dodo. | <input type="checkbox"/> |
| Reasons for the extinction of the dodo. | <input type="checkbox"/>           | An explanation for the unreliable evidence.   | <input type="checkbox"/> |
| Summary of the plight of the dodos.     | <input type="checkbox" value="1"/> | Humans arrived on Mauritius.                  | <input type="checkbox"/> |

1 mark

## 1. LEARNING TO SUMMARISE TEXT



### 6 word story

Preparation time: Low Ages: Primary & Secondary Media type used: Video, Image & Text



By writing a summary with a limited number of words, students must focus on the important ideas and become thoughtful in their word choice. The purpose of this strategy is for students to discern the most important ideas and summarise information for any topic by studying an image, video, or article.



**Materials:** A sample image for practice, an image, video segment, or article that reinforces a concept from the unit of study (prefer for images, animation)

1. Introduce the strategy to your students by selecting an image. Have the students describe what they see. Then, ask them to predict what happened before and after the photo was taken. Students should provide a reason or use evidence from the image for their shared response.
2. Students will create their six word story from the first practice image. Share their story with a partner.

Use the *6 word story* strategy to develop the skill of summarising a paragraph of text. Search Discovery Education Espresso for fact files and articles on any subject, and ask pupils to write a six word summary of each paragraph. They could mix these up and swap with a partner to see if they can match the summary to the correct paragraph.

[www.discoveryeducation.co.uk/sos](http://www.discoveryeducation.co.uk/sos) > 6 word story

## 2. SEQUENCING EVENTS

**Lucy Gray**

**Quit**

The pictures opposite are based on a poem by William Wordsworth called 'Lucy Gray'. Put the pictures into an order that tells your own version of the story of Lucy Gray. You can do this by using your mouse to drag the pictures into the spaces at the bottom of the page, beginning with the left box.

Picture preview

A storyboard activity such as this one, from the KS2 poetry module, can help pupils to practice sequencing events and information.

KS2 > English > Poetry > Activities > Storyboard

## 3. DEVELOPING DETAIL

Discovery | espresso

Name \_\_\_\_\_ Date \_\_\_\_\_

**Headlines**

**Activity 1: Headline first**

Your teacher will show you a headline, but the story will be hidden.  
Read the headline and answer the following questions:

What do you think the article is going to be about?

Why do you think that?

Printable activities in the *Newspapers* module in KS2 English explore the relationship between headlines and the stories they represent. This can help pupils to deepen their understanding of how summaries, like the ones in the question above can be linked to more detailed paragraphs in the text they have read.

KS2 > English > Newspapers > Printable resources

## Lesson routes

There are SATS lesson routes available in the *Teacher Planning* section of Discovery Education Espresso. These pull together resources from right across the service which are focused on particular topics or skills covered by the tests. Try exploring the 'Key ideas from more than one paragraph' route to focus on summarizing skills.