## Statistics

## End-of-Strand Assessment

Name: $\qquad$ Date: $\qquad$

1. The bar chart shows the favourite fruits of children at a primary school.

Bar Chart to Show the Favourite Fruit in a Year 3 Class

a) Which fruit is the most popular?
b) Which fruit is the least popular?
c) Which two fruits are equally as popular as each other?
2. The table shows the number of year 3 children that attend after school clubs.

| Club | Number of Children |
| :---: | :---: |
| art | 10 |
| gymnastics | 5 |
| drama | 15 |
| karate | 18 |

a) How many year 3 children go to art club?
b) Which club is the most popular with year 3 children?
c) How many children attend art and drama club altogether?
d) What is the difference between the number of children attending gymnastics club and the number of children attending karate club?
3. The bar chart shows the results of a traffic survey conducted by year 3 children.

a) On the bar chart, draw a bar showing the number of red cars.
b) How many more silver cars were spotted than green cars?
c) How many fewer blue cars were spotted than black cars?
d) How many green and blue cars were spotted in total?
4. The pictogram shows the favourite ice cream flavours of children at a holiday club.

| Flavour | Number of Children |
| :---: | :---: |
| vanilla | chocolate |
| strawberry |  |
| mint |  |

Use this information to complete the table. The first part has been done for you.

| Flavour | Tally | Total |
| :---: | :---: | :---: |
| vanilla | H\| | 6 |
| chocolate |  |  |
| strawberry |  |  |
| mint |  |  |

5. The table below shows which sports a group of children play.

a) Who does not play tennis? $\qquad$
b) Who only plays one sport? $\qquad$
c) Which two sports do Chris and Anwar both play?
d) How many children play football? $\qquad$
6. A sweet shop has changed its prices. The table shows the
old and new prices.

| Sweet | Old Price | New Price |
| :---: | :---: | :---: |
| lollipop | $50 p$ | $63 p$ |
| chocolate bar | $60 p$ | $75 p$ |
| fruit chews | $30 p$ | $28 p$ |
| mints | $65 p$ | $67 p$ |

a) By how much have lollipops increased in price?
b) Which type of sweet is now cheaper?
c) How much more than mints does a chocolate bar cost now? $\qquad$
$\qquad$
7. The bar chart shows how many cakes each class baked for a charity cake sale.


Complete the pictogram using information from the bar chart.

| Class | Amount of Cakes Baked |
| :---: | :---: |
| year 3 |  |
| year 4 |  |
| year 5 |  |
| year 6 |  |

$=10$ cakes
8. The tally chart shows how many prizes some children won at a fair.
a) Complete the totals column.

| Child | Number of Prizes | Total |
| :---: | :--- | :--- |
| Bill | HI $\\|$ |  |
| Betty | HI $\\|$ |  |
| Sami | $\\|$ |  |
| Alice | HY HH |  |
| Owen | $\\|$ |  |

b) Use the information above to complete the bar chart.
$10-$ Number of Prizes Won by Each Child

|  |  | Answer |  |  | Assessment Focus | Possible Misconceptions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 2 marks <br> 1 mark for two correct answers <br> 2 marks for all three correct answers | a) ban <br> b) pear <br> c) oran | ana <br> nges and apples |  | Interpret information from bar charts | Children may not understand that each increment marked on the scale is increasing in steps of two. <br> They may be unable to identify totals which are halfway between two increments. |
| 2. | 3 marks <br> 2 marks for two or three correct answers <br> 3 marks for all four correct answers | a) 10 <br> b) kara <br> c) 25 <br> d) 13 |  |  | Interpret information from a table | Children may misread data from the table. <br> They may not understand the term 'find the difference'. |
| 3. | 3 marks <br> 2 marks for two or three correct answers <br> 3 marks for all four correct answers | a) Bar <br>  <br> b) 20 <br> c) 15 <br> d) 20 | completed as s <br> Chart to Show the Number of D | own. | Interpret information from bar charts and use it to solve oneand two-step calculations | Children may not understand that each increment marked on the scale is increasing in steps of five. <br> They may not be able to accurately draw the bar on the graph. |


|  |  |  | Answer |  | Assessment Focus | Possible Misconceptions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. | 2 marks <br> 1 mark for two correctly completed rows <br> 2 marks for all three correctly completed rows | Tally chart completed as shown. |  |  | Interpret information from a pictogram and represent the data in a different way | Children may not realise that each ice cream represents two. <br> They may not remember how to write a tally and may miss out the fifth tally line or not mark in groups of five. |
|  |  | Flavour | Tally | Total |  |  |
|  |  | vanilla | HYI | 6 |  |  |
|  |  | chocolate | Hた HT | 10 |  |  |
|  |  | strawberry | \|||| | 4 |  |  |
|  |  | mint | 11 | 2 |  |  |
| 5. | 3 marks <br> 2 marks for two or three correct answers <br> 3 marks for all four correct answers | a) Jo <br> b) Kim <br> c) netball <br> d) 2 | d tennis |  | Interpret information from a table and use it to solve onestep calculations | Children may not understand the different rows and columns of the table. |
| 6. | 2 marks <br> 1 mark for two correct answers <br> 2 marks for all three correct answers | a) $13 p$ <br> b) fruit che <br> c) $8 p$ |  |  | Interpret information from a table and use it to solve oneand two-step calculations | Children may find the correct data but not be able to carry out the calculations. <br> They may confuse the new and old price. |
| 7. | 2 marks <br> 1 mark for two or three rows completed correctly <br> 2 marks for all four rows completed correctly | Pictogram completed as shown. |  |  | Interpret information from a bar chart and represent the data on a different way | Children may draw one picture per cake as they do not understand that each picture represents ten cakes baked. <br> They may not understand that half a cake should be shown to show five. |
|  |  | Class $\quad$ Amount of Cakes Baked |  |  |  |  |
|  |  | Year 3 |  |  |  |  |
|  |  | Year 4 |  |  |  |  |
|  |  | Year 5 |  |  |  |  |
|  |  | Year 6 |  |  |  |  |


|  |  | Answer |  |  | Assessment Focus | Possible Misconceptions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8a) | 2 marks <br> 1 mark for three <br> or four rows completed correctly <br> 2 marks for all five rows completed correctly | Child | Number of Prizes | Total | Children can complete a table and find totals from a tally chart | Children may not remember how to write a tally and may miss out the fifth tally line or not mark in groups of five. |
|  |  | Bill | HY II | 7 |  |  |
|  |  | Betty | HH \|II | 8 |  |  |
|  |  | Sami | II | 2 |  |  |
|  |  | Alice | HH HH | 10 |  |  |
|  |  | Owen | \||| | 3 |  |  |
| 8b) | 2 marks <br> 1 mark for three or four bars completed correctly <br> 2 marks for all five bars completed correctly | Bars com | leted as shown. <br> ber of Prizes Won by Each |  | Interpret information from a table and use it to accurately draw a bar chart | Children may not read the scale correctly. <br> They may not leave gaps between the bars. <br> Children may not draw the bars accurately. |

## What Is an S-Plan?

Our small-step maths planning documents, available from EYFS+, are carefully structured, breaking each mathematical concept into progressive, smaller steps of learning and identifying points in learning where possible misconceptions will need to be addressed. Links to all planning, assessments and engaging activities are provided. Our sessions are ideal for whole-class teaching, group interventions and 1:1 tuition sessions for students who simply need that extra boost to reach their potential.


Our assessments, lesson planning and interventions are all linked into our small-step plans. This ensures that you have everything you need to teach at the click of a button!


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Clear picture of your students' understanding


