



**THIRD SPACE
LEARNING**

Modal Class Worksheet

Statistics and Probability

Grades 6 to 8

Skill Questions

Name:

Date:

- 1 The table shows the grouped data about the scores in 35 games. State the modal class interval.

Scores	Frequency
0 to 9	2
10 to 19	12
20 to 29	13
30 to 39	8

Answer

- 2 The table shows the grouped data about the height of 200 trees in a forest. State the modal class interval.

Height (h meters)	Frequency
$0 < h \leq 5$	22
$5 < h \leq 10$	12
$10 < h \leq 15$	46
$15 < h \leq 20$	48
$20 < h \leq 25$	62
$25 < h \leq 30$	8

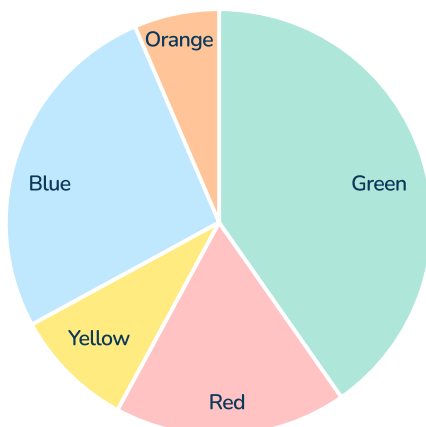
Answer

- 3 The table shows the grouped data about the number of siblings students have. State the modal class interval.

Scores	Frequency
0 to 1	27
2 to 3	34
4 to 5	5
6 to 7	1

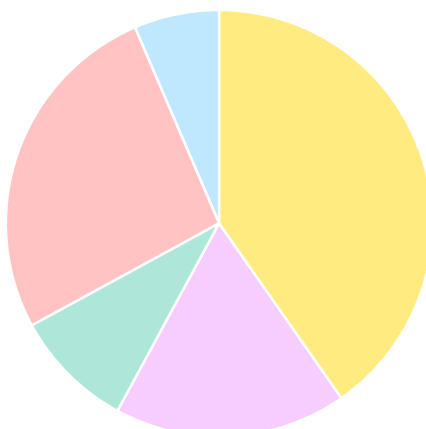
Answer

- 4 The pie chart below shows the favorite color of students in a class. State the modal class for the pie chart.



Answer

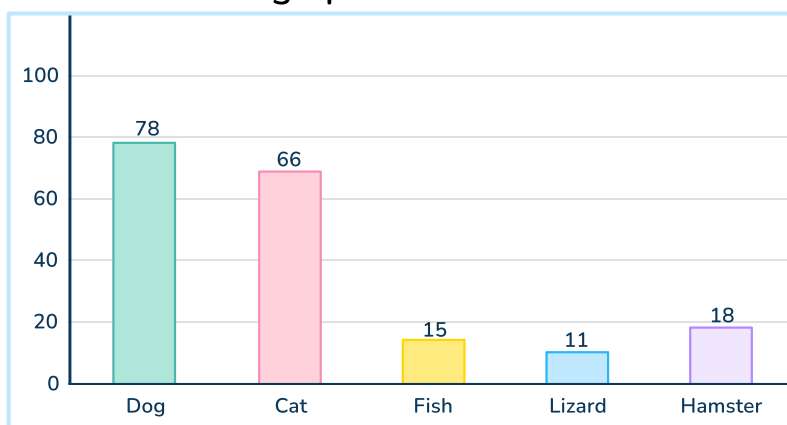
- 5 The pie chart below shows how many books students have read this year. State the modal class for the pie chart.



Answer

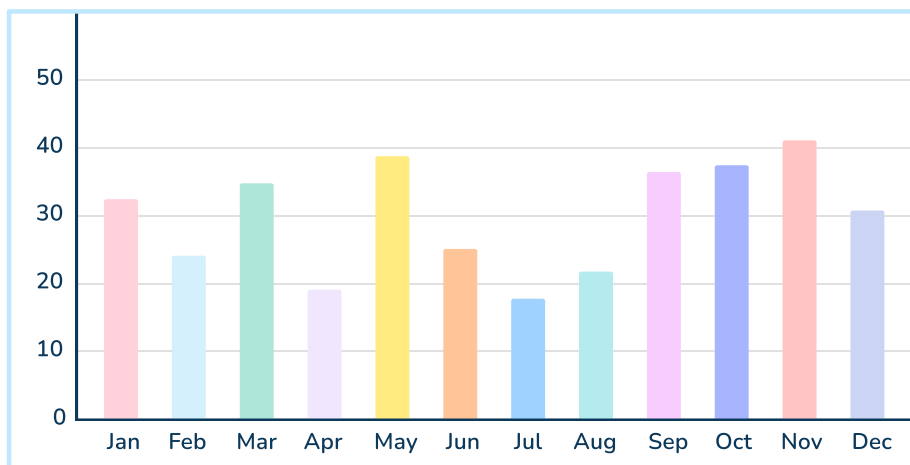
1 - 5 6 - 10 11 - 15 16 - 20 21 - 25

- 6 The bar graph below shows what types of pets students have. State the modal class for the bar graph.



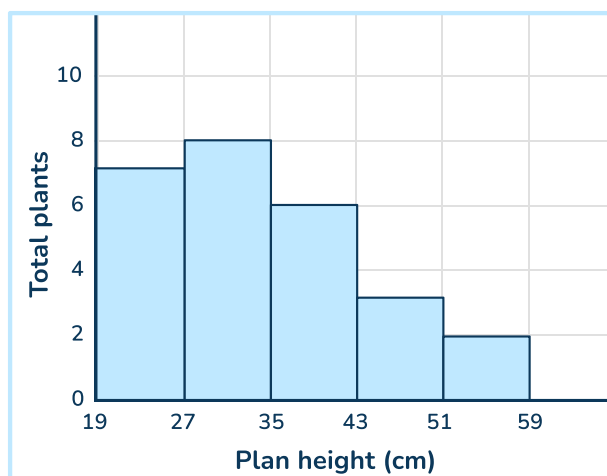
Answer

- 7 The bar graph below shows students' birthday months. State the modal class for the bar graph.



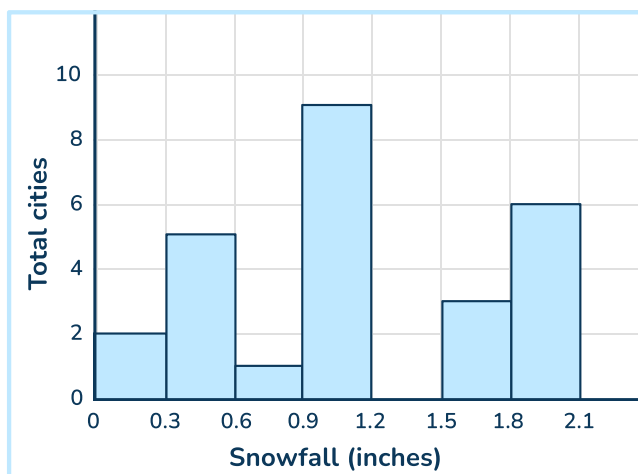
Answer

- 8 The histogram below shows the heights for a group of plants. State the modal class for the histogram.



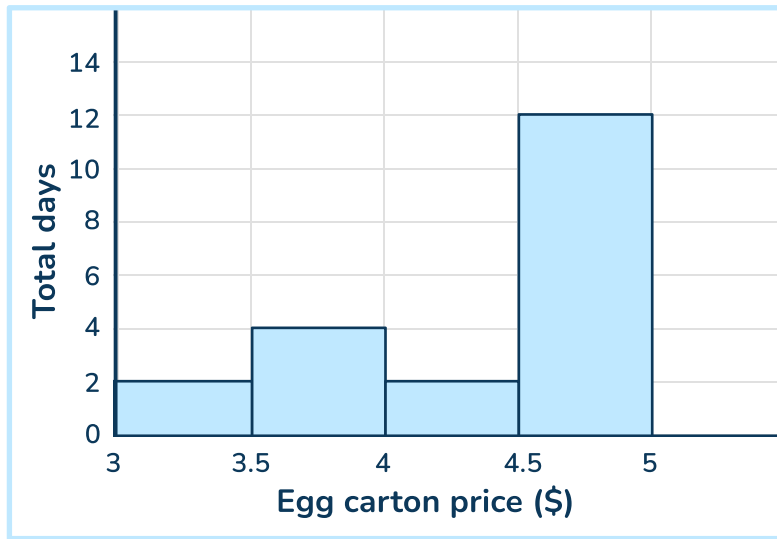
Answer

- 9 The histogram below shows the total snowfall for a group of cities. State the modal class for the histogram.



Answer

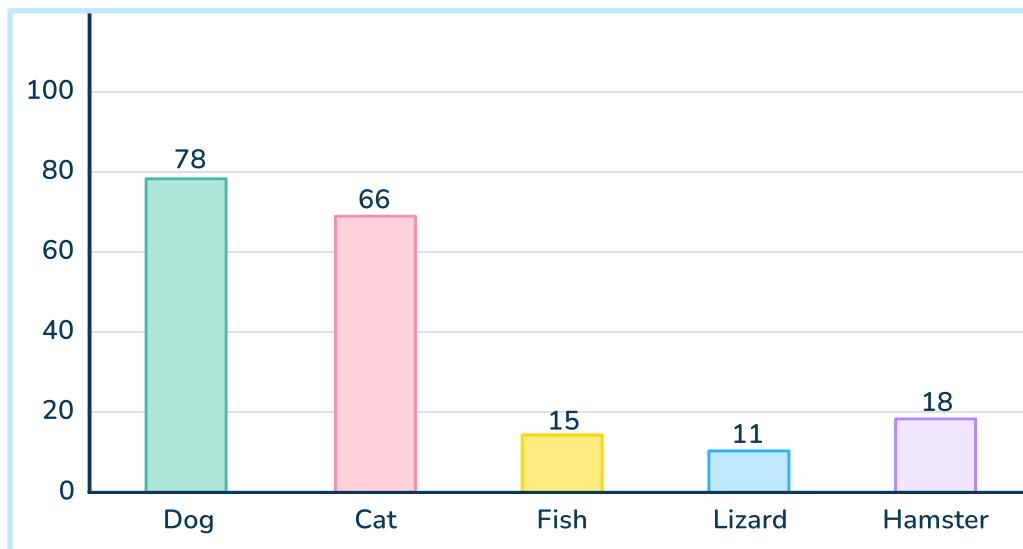
- 10 The histogram below shows the price for a carton of eggs for a sample of days. State the modal class for the histogram.



Answer

Applied Questions

- 11 The bar graph below shows what types of pets students have.



Describe how the graph would change if the modal class was 'cat.'

- 12 The table shows the grouped data about the height of 200 trees in a forest.

Height (h meters)	Frequency
$0 < h \leq 5$	22
$5 < h \leq 10$	12
$10 < h \leq 15$	46
$15 < h \leq 20$	48
$20 < h \leq 25$	62
$25 < h \leq 30$	10

If the data was regrouped into new classes (by the colors shown), what would the new modal class be? Explain.

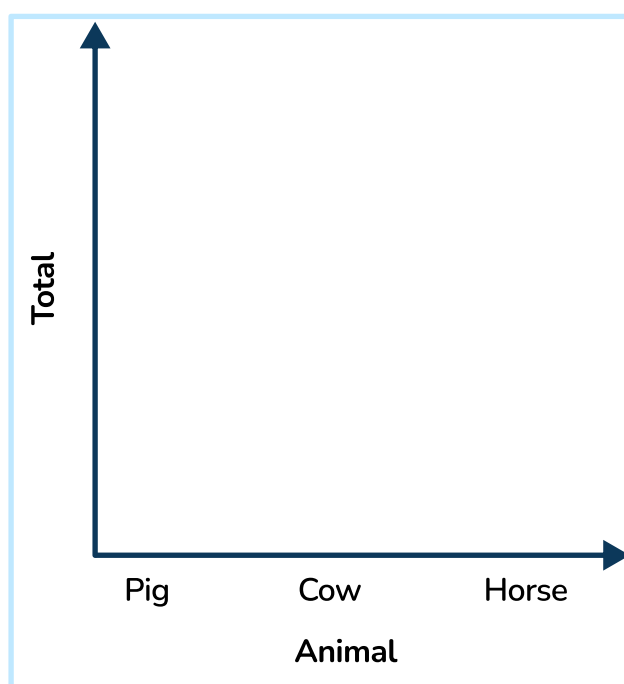
13 Create the frequency table given the clues:

- Pineapple is the modal class.
- Blueberry and grape are both half the modal class.
- Strawberry has two less votes than the modal class.

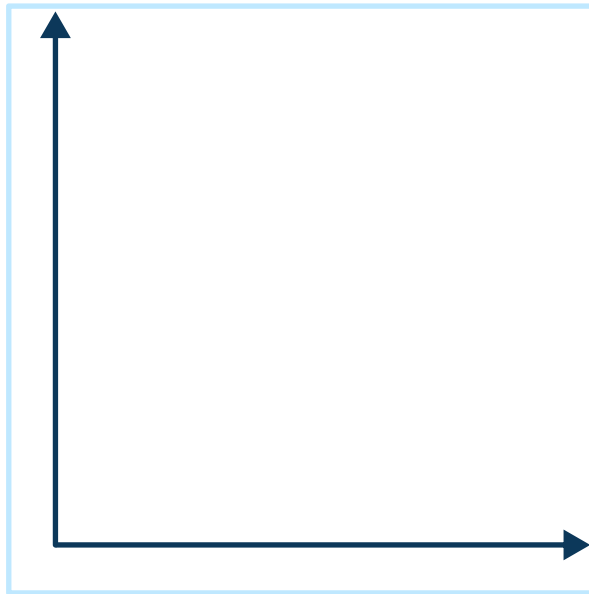
Smoothie Flavor	Votes
Strawberry	
Blueberry	
Pineapple	
Grape	

14 Create the bar graph given the clues:

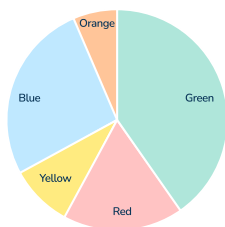
- Cow is a third of the modal class.
- Pig has 17.
- Horse is the modal class.
- Cow has 3 more than pig.

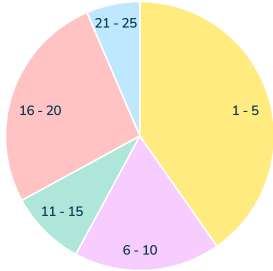
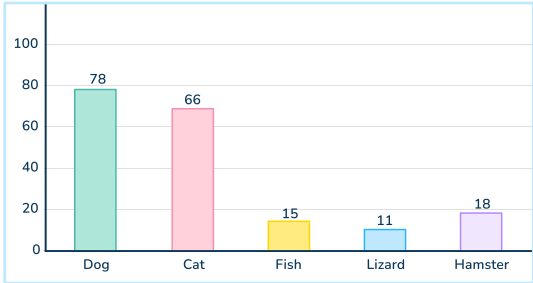
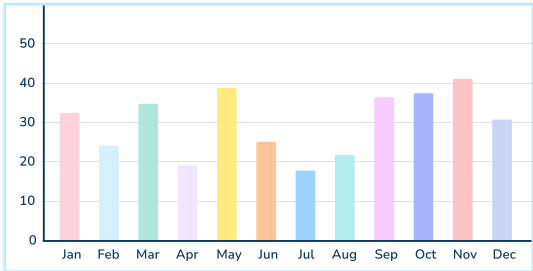


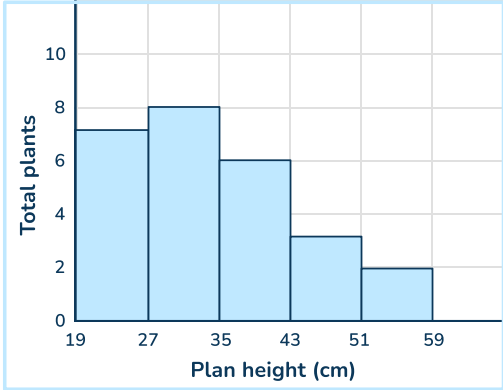
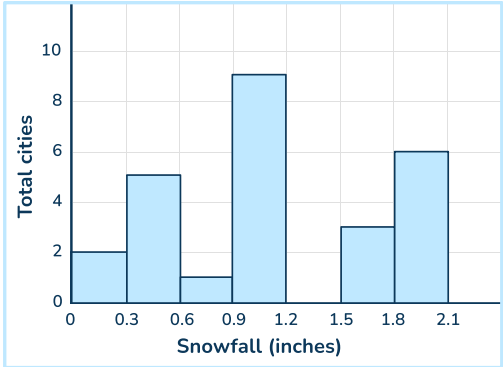
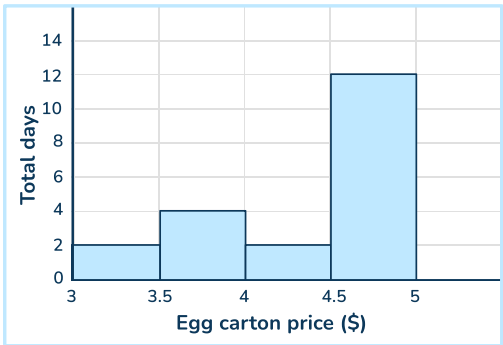
- 15 Create a histogram that has a modal class of 2.5 – 3.
Label the units on both axes.

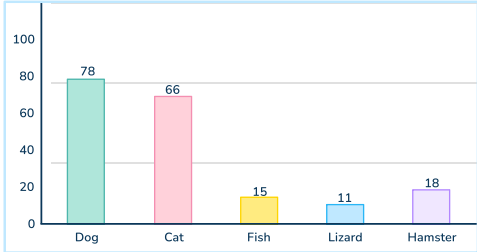


Answers

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5	The pie chart below shows how many books students have read this year. State the modal class for the pie chart.  1 - 5 6 - 10 11 - 15 16 - 20 21 - 25	1–5	6.SP.B.5c
6	The bar graph below shows what types of pets students have. State the modal class for the bar graph. 	Dog	6.SP.B.5c
7	The bar graph below shows students' birthday months. State the modal class for the bar graph. 	November (Nov)	6.SP.B.5c

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8	The histogram below shows the heights for a group of plants. State the modal class for the histogram. 	27–35	6.SP.B.5c
9	The histogram below shows the total snowfall for a group of cities. State the modal class for the histogram. 	0.9–1.2	6.SP.B.5c
10	The histogram below shows the price for a carton of eggs for a sample of days. State the modal class for the histogram. 	4.5–5	6.SP.B.5c

Question number	Question	Answers	Standard
11	The bar graph below shows what types of pets students have.  Describe how the graph would change if the modal class was 'cat.'	<i>Explanations will vary.</i> The bar for cat would be larger than dog, so there would be more than 78 cats. OR The bar for dog would be lower than cat, so there would be less than 66 dogs.	6.SP.B.5c
12	The table shows the grouped data about the height of 200 trees in a forest. If the data was regrouped into new classes (by the colors shown), what would the new modal class be? Explain.	$10 < h \leq 20$ <i>Explanations will vary.</i> <i>Example answer:</i> The new modal class would be $10 < h \leq 20$, because it will have 94 trees, which is the most.	6.SP.B.5c

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13	Create the frequency table given the clues: - Pineapple is the modal class. - Blueberry and grape are both half the modal class. - Strawberry has two less votes than the modal class. <table><thead><tr><th>Smoothie Flavor</th><th>Votes</th></tr></thead><tbody><tr><td>Strawberry</td><td></td></tr><tr><td>Blueberry</td><td></td></tr><tr><td>Pineapple</td><td></td></tr><tr><td>Grape</td><td></td></tr></tbody></table>	Smoothie Flavor	Votes	Strawberry		Blueberry		Pineapple		Grape		Answers will vary. Example answer: <table><thead><tr><th>Smoothie Flavor</th><th>Votes</th></tr></thead><tbody><tr><td>Strawberry</td><td>18</td></tr><tr><td>Blueberry</td><td>10</td></tr><tr><td>Pineapple</td><td>20</td></tr><tr><td>Grape</td><td>10</td></tr></tbody></table>	Smoothie Flavor	Votes	Strawberry	18	Blueberry	10	Pineapple	20	Grape	10	6.SP.B.5c
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