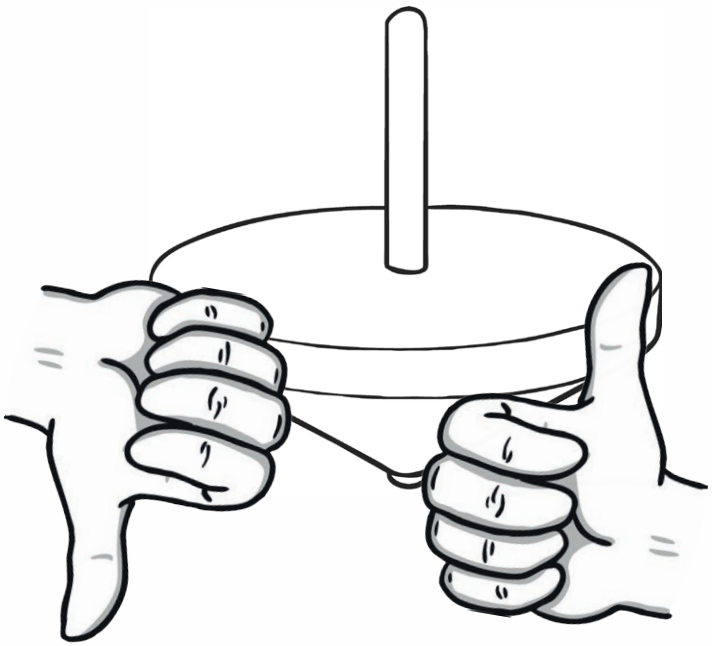
Maths Assessment Year 3

Statistics and Probability



Maths Assessment Year 3: Statistics and Probability

1. Conduct chance experiments, identify and describe possible outcomes and recognise variation in results. (ACMSP067)

Name: Date:

/28 total marks

Maths Assessment Year 3: Statistics and Probability

1. Write certain, likely, unlikely or impossible next to each statement.

5 marks

a) The sky will turn green tomorrow morning.

b) The sun will set on Friday afternoon.

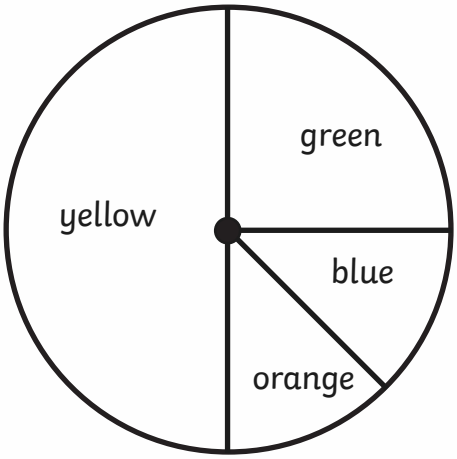
c) I will grow taller than an elephant.

d) We will have school holidays this year.

e) It might rain on the weekend.

2. Have a look at the spinner and answer the questions.

4 marks



a) Which colour is the spinner most likely to land on?

b) Which two colours have the same chance of the spinner landing on them?

c) Is it more likely that the spinner will land on green than the yellow? Explain your answer.

3. Use the spinner above to answer the following true or false questions.

5 marks

a) $\frac{1}{2}$ of the circle is green.

b) You are more likely to land on orange than blue.

c) $\frac{1}{4}$ of the circle is yellow.

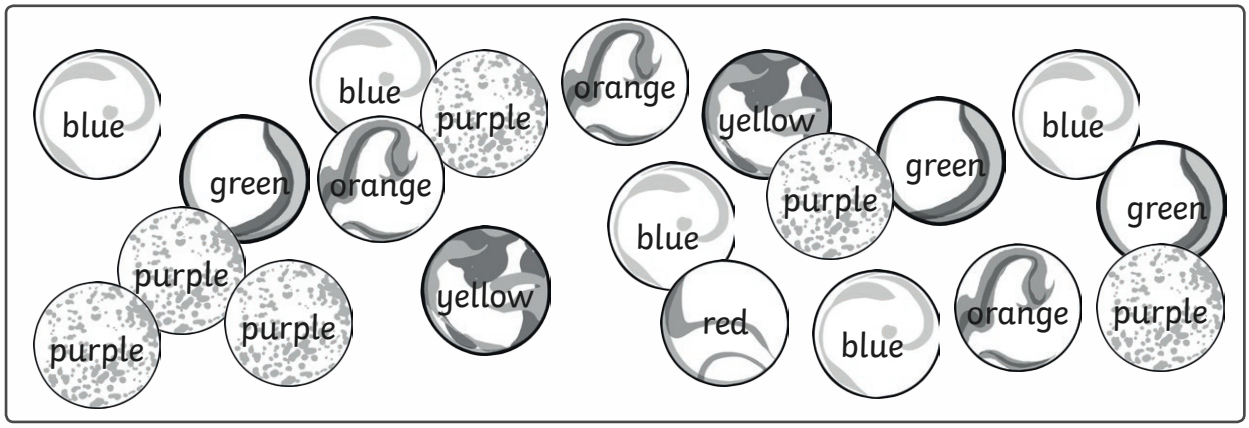
d) Yellow has a more likely chance of being landed on than green.

e) Write the fraction of the colour yellow.

total for this page

10 marks

4. Have a look at the following box of marbles to answer the following questions.



a) How many marbles are there altogether? _____.

b) How many marbles are blue?_____ out of _____.

c) How many marbles are green? _____ out of _____.

d) How many marbles are purple, orange and yellow? _____ out of _____.

e) How many marbles are orange?_____out of _____.

f) What colour marble has the greatest chance of being pulled out of the box? Explain your answer.

_____

_____

_____

g) What colour marble has the least chance of being pulled out of the box? Explain your answer.

_____

_____

_____

h) If two purple marbles are taken out of the box, what is the chance now of pulling out a purple one? _____out of _____.

4 marks

5. Can you think of a possibility where:

a) An outcome is impossible: _____

b) An outcome is unlikely: _____

c) An outcome is likely: _____

d) An outcome is certain: _____

total

1	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results.	Notes	5 marks
	a) Impossible b) Certain c) Impossible d) Certain e) Likely		
2	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results.		5 marks
	a) Yellow b) Orange and Blue c) No -Answers will vary.	Award children one mark for stating 'No'. Award children one mark for stating that the fraction of the yellow is $\frac{1}{2}$ and the fraction of the green is $\frac{1}{4}$. $\frac{1}{4}$ is a smaller fraction than $\frac{1}{2}$, therefore green has a smaller chance of being landed on compared to yellow, not a greater chance.	
3	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results.		5 marks
	a) False b) False c) False d) True e) $\frac{1}{2}$		
4	Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond.		10 marks
	a) 20 b) 5 out of 20 c) 3 out of 20 d) 11 out of 20 e) 3 out of 20		

	f)	Purple- Answers will vary.	Award children one mark for stating 'Purple' Award children one mark for stating answers similar to the following: Purple has the greatest chance because there are 6 of them in total. This colour has the most out of all of the colours. It has a 6/20 chance of being pulled out.	
	g)	Red- Answers will vary	Award children one mark for stating 'Red' Award children one mark for stating answers similar to the following: Red has the least chance because there is only one of them in total. This colour has the least amount out of all of the colours. It has a 1/20 chance of being pulled out.	
	h)	4 out of 18		
5	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results.			4 marks
	a)	Answers will vary.	Award children one mark for stating an event or occurrence that is impossible.	
	b)	Answers will vary.	**Award children one mark for stating an event or occurrence that is unlikely.**	
	c)	Answers will vary.	**Award children one mark for stating an event or occurrence that is likely.**	
	d)	Answers will vary.	**Award children one mark for stating an event or occurrence that is certain.**	
			Total	28