

# Year 7 Class 31 questions

## Q1

If today is Monday, what chance is it that tomorrow will be Friday?

- unlikely (probably won't happen)
- likely (probably will happen)
- no chance
- fifty-fifty

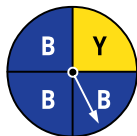
## Q2

A fair die is rolled. Find the probability of throwing a six.

$\frac{1}{6}$

## Q3

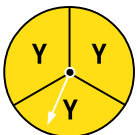
What is the chance the arrow on the spinner will land on green?



- likely (probably will happen)
- three chances in four
- impossible
- one chance in four

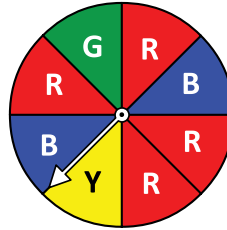
## Q4

What is the chance the arrow on the spinner will land on red?



- certain
- two chances in three
- one chance in three
- impossible

## Q5



The spinner is spun once.

Find the probability that the spinner does not land on red.

$\frac{1}{2}$

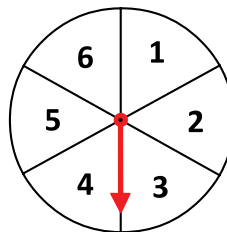
Find the probability that the spinner lands on red or blue.

$\frac{3}{4}$

Find the probability that the spinner does not land on either red or blue.

$\frac{1}{4}$

## Q6



The spinner is spun once.

Find the probability that the spinner lands on an even number.

$\frac{1}{2}$

Find the probability that the spinner lands on a number less than 4.

$\frac{1}{2}$

Find the probability that the spinner lands on 5 or more.

$\frac{1}{3}$

### Q7

Lisa tosses two coins and records the results.

Result	Frequency
2 heads	22
1 head	52
0 heads	26
	100

Using these results, the chance of getting 2 heads is closest to

- 10%  25%  50%  33%

### Q8

Oscar tosses two coins and records the results.

Result	Frequency
2 tails	28
1 tail	50
0 tails	22
	100

Using these results, the chance of getting 2 tails is closest to

- 10%  25%  50%  33%

### Q9

A survey of 100 factory workers found that 20 were left-handed. If this sample is representative of the 5100 workers in a factory, how many left-handed factory workers would you expect?

1020

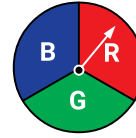
### Q10

A survey of 100 children in a village found that 95 of them had blue eyes. If this is representative of the 3600 people in the whole village, how many blue eyed people could you expect there to be in the village?

3420

### Q11

When the arrow is spun, what is the chance that it lands on blue?



- three chances in four  
 two chances in three  
 one chance in three  
 likely (probably will happen)

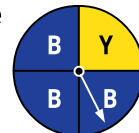
### Q12

A die is rolled. What is the chance of getting a 3?

- even chance  
 two chances in three  
 likely (probably will happen)  
 one chance in six

### Q13

What is the chance the arrow on the spinner will land on blue?



- unlikely  
 certain  
 three chances in four  
 one chance in four

**Q14**

A pack of 52 playing cards has 4 suits: Clubs, Spades, Diamonds and Hearts. Julie draws one card from this pack. Find the probability that the card is:

a Heart.  $\frac{\square}{\square} = \frac{1}{4}$

a red (Hearts or Diamonds).  $\frac{\square}{\square} = \frac{1}{2}$

a black (Spades or Clubs).  $\frac{\square}{\square} = \frac{1}{2}$

a black 6.  $\frac{\square}{\square} = \frac{1}{26}$

an Ace.  $\frac{\square}{\square} = \frac{1}{13}$

**Q15**

A bag contains 3 blue, 5 black, 6 red and 6 chrome hairclips. Gillian is going to do her hair. Find the probability that she chooses:

a blue hairclip.  $\frac{\square}{\square} = \frac{3}{20}$

a black hairclip.  $\frac{\square}{\square} = \frac{1}{4}$

a chrome hairclip.  $\frac{\square}{\square} = \frac{3}{10}$

a hairclip that is either red or chrome.  $\frac{\square}{\square} = \frac{3}{5}$

a hairclip that is not red.  $\frac{\square}{\square} = \frac{7}{10}$

**Q16**

Fred tosses three coins and records the results.

Result	Frequency
3 tails	12
2 tails	36
1 tail	38
0 tails	14
	100

Using these results, the chance of getting 3 tails is closest to

- 10%    25%    33%    50%

**Q17**

Rosie tosses three coins and records the results.

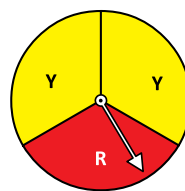
Result	Frequency
3 tails	12
2 tails	38
1 tail	36
0 tails	14
	100

Using these results, the chance of getting 2 tails is closest to

- 10%    25%    37.5%    50%

**Q18**

The arrow was spun 100 times.



Result	Frequency
red	32
yellow	68
	100

Using these results, the chance it lands on red is closest to

- 33%    40%    60%    67%

**Q19**

At Ian's cake shop, 5 of the last 12 cakes sold were vanilla cakes. If 60 cakes are sold in a day, how many of these would he expect to be vanilla cakes?

25

### Q20

At Ollie's bakery, 6 of the last 14 pies sold were curry pies. If Ollie sells 70 pies in a day, how many curry pies could he expect to sell?

30

### Q21

There are approximately 406 000 university students in NSW. A random sample of 1000 students found that 450 of them lived with their parents. Based on this, how many NSW university students live with their parents?

182 700

### Q22

What is the chance that it will rain at least once in the next five years?

- even chance
- impossible
- likely (probably will happen)
- unlikely (probably won't happen)

### Q23

A die is rolled. What is the chance of getting an even number?

- even chance
- impossible
- one chance in six
- unlikely (probably won't happen)

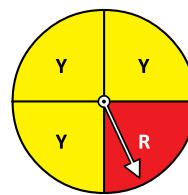
### Q24

A die is rolled. What is the chance of getting a number less than 4?

- one chance in four
- fifty-fifty
- likely
- no chance

### Q25

The arrow was spun 100 times.



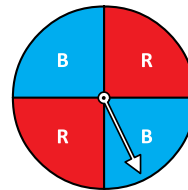
Result	Frequency
red	27
yellow	73
	100

Using these results, the chance it lands on red is closest to

- 15%
- 25%
- 50%
- 75%

### Q26

The arrow was spun 100 times.



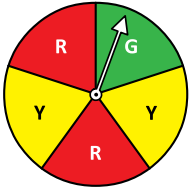
Result	Frequency
red	44
blue	56
	100

Using these results, the chance it lands on blue is closest to

- 25%
- 33%
- 50%
- 75%

**Q27**

The arrow was spun 100 times.



Result	Frequency
green	23
red	41
yellow	36
	100

Using these results, the chance it lands on green is closest to

- 10% 
  20% 
  33% 
  40%

**Q28**

Julia has a 32% chance of hitting the bullseye when throwing a dart.

Find the chance of missing the bullseye.

% 68%

During a game, Julia had 150 throws. How many times would you expect her to hit the bullseye?

48

**Q29**

A company's research shows it makes sales to 38% of all people who make a phone enquiry.

What percentage of phone enquiries do not result in a sale?

% 62%

Out of 1850 phone enquiries made, how many sales could be expected?

703

**Q30**

A company's research shows it makes sales to 28% of all people who make an email enquiry about their products.

What percentage of email enquiries do not result in a sale?

% 72%

1200 people made email enquiries last month. From these, how many sales could be expected?

336