

Surname	
Other Names	
Candidate's Signature	

## GCSE 9 - 1 Questions

### Probability Scale

**Calculator Not Allowed**

#### INSTRUCTIONS TO CANDIDATES

- Write your name in the space provided.
- Write your answers in the spaces provided in this question paper.
- Answer ALL questions.
- Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.
- You should have a ruler, compass and protractor where required.

**Total Marks :**

1) Choose from

Impossible	Certain	Likely	Unlikely	Evens
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to describe the probability of each of the following.

(a) An ordinary coin when tossed will show “heads”.

Answer \_\_\_\_\_ [1]

(b) Everyone in a class at school will have the same colour of hair.

Answer \_\_\_\_\_ [1]

(c) You will pick a black ball out of a bag only containing black balls.

Answer \_\_\_\_\_ [1]

(d) An ordinary dice will land on an 8.

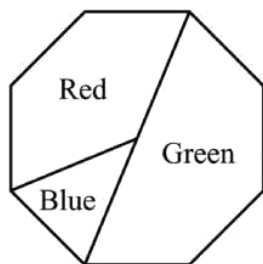
Answer \_\_\_\_\_ [1]

2) Complete each of the following statements with an appropriate word

(i) **0** is the probability of an \_\_\_\_\_ event. [1]

(ii) **1** is the probability of a \_\_\_\_\_ event. [1]

3)



The 8 sided spinner can land on any of three colours red, blue or green.

(a) On which colour is it least likely to land?

Answer \_\_\_\_\_ [1]

(b) Write down a suitable **word** to describe the chance of the spinner landing on green.

Answer \_\_\_\_\_ [1]

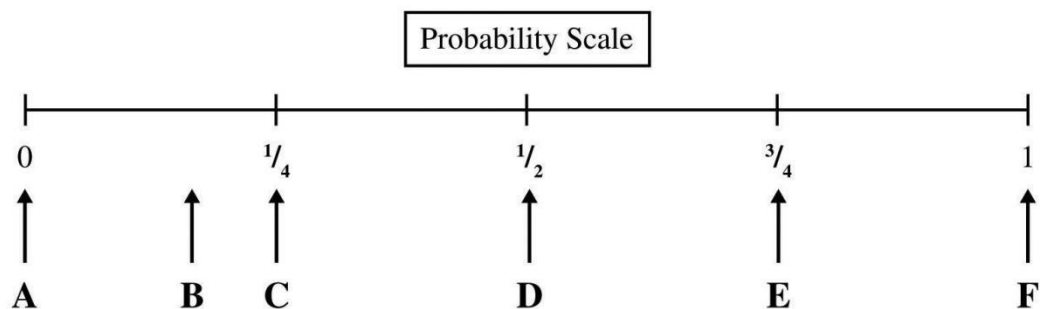
(c) Write down a suitable **word** to describe the chance of the spinner landing on yellow.

Answer \_\_\_\_\_ [1]

(d) Write down a suitable **word** to describe the chance of the spinner landing on red, blue or green.

Answer \_\_\_\_\_ [1]

4)



Match each of the events below with a letter from the probability scale above.

A season selected at random is Winter.      Answer Letter \_\_\_\_\_[1]

A triangle has 3 sides.      Answer Letter \_\_\_\_\_[1]

A football captain wins the toss of a coin.      Answer Letter \_\_\_\_\_[1]

A fair dice is tossed and lands on a 6.      Answer Letter \_\_\_\_\_[1]

5) Choosing from

likely      unlikely      certain      impossible

complete the sentences below.

It is \_\_\_\_\_ that Easter Sunday will fall on the 25th December.

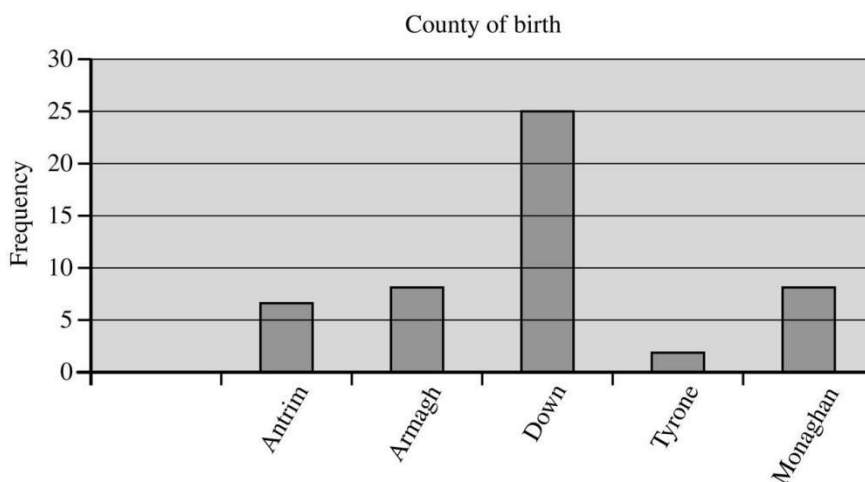
It is \_\_\_\_\_ that someone I know will win the Lottery draw on Saturday.

It is \_\_\_\_\_ that some of the spectators at a football match were born in the month of December.

It is \_\_\_\_\_ that Manchester United will either win, lose or draw their next match.

[4]

6) (a)



The bar chart shows the county of birth for the 50 members of a sports club.

Fill in the table below, leaving some boxes empty to show the likelihood that a member chosen at random was born in

- (i) Down,  
(ii) Tyrone

Impossible	Very unlikely	Unlikely	Even chance	Likely	Very likely	Certain
		Armagh Monaghan				

[2]

(b) very unlikely    likely    impossible    certain    unlikely    very likely

From the list of terms above choose one to describe the probability of each of the following events happening in Northern Ireland.

- (i) Stephen, who is 12 years of age, passing his driving test next week.

Answer \_\_\_\_\_ [1]

- (ii) There will be a rainy day in September.

Answer \_\_\_\_\_ [1]

- (iii) There will be snow in April.

Answer \_\_\_\_\_ [1]

7) Choose from

Impossible

Certain

Likely

Unlikely

Very unlikely

Evens

Very likely

to describe the probability of each of the following. Explain your answers.

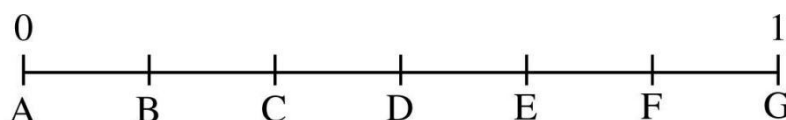
**(a)** An ordinary dice will land on an odd number.

Answer \_\_\_\_\_ because \_\_\_\_\_  
 \_\_\_\_\_ [2]

**(b)** You will sleep some time this week.

Answer \_\_\_\_\_ because \_\_\_\_\_  
 \_\_\_\_\_ [2]

8)



A fair dice, marked 1, 2, 3, 4, 5, 6 is thrown.

Choose the letter on the probability scale which best matches

**(a)** the probability of a score of 3,

Answer \_\_\_\_\_ [1]

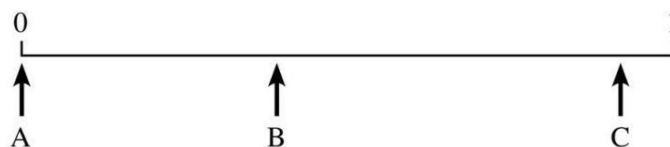
**(b)** the probability of a score of less than 3,

Answer \_\_\_\_\_ [1]

**(c)** the probability of a score of less than 8

Answer \_\_\_\_\_ [1]

- 9) Match each of the following statements to position A, B or C on the probability line. Give a reason for your answer.



- (i) You will use a phone sometime in the next week.

Answer \_\_\_\_\_ Reason \_\_\_\_\_

\_\_\_\_\_ [1]

- (ii) You will fly to the moon sometime in the next week.

Answer \_\_\_\_\_ Reason \_\_\_\_\_

\_\_\_\_\_ [1]

- (iii) You will read a newspaper sometime in the next week.

Answer \_\_\_\_\_ Reason \_\_\_\_\_

\_\_\_\_\_ [1]

10)

certain	likely	even	unlikely	impossible
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Choose a word from the list above which best describes the chance of

- (a) Christmas Day falling on 1st January,

Answer \_\_\_\_\_ [1]

- (b) a football captain winning the toss of a coin.

Answer \_\_\_\_\_ [1]

- (c) snow falling on the Mourne Mountains in December.

Answer \_\_\_\_\_ [1]

11) Choose from

Impossible      Certain      Likely      Unlikely  
Very unlikely      Even      Very likely

to describe the probability of each of the following. Explain your answers.

(a) A baby being born is a girl.

Answer \_\_\_\_\_ because \_\_\_\_\_  
\_\_\_\_\_ [1]

(b) A bus will have a puncture on the way to school.

Answer \_\_\_\_\_ because \_\_\_\_\_  
\_\_\_\_\_ [1]

(c) You will eat some food this week.

Answer \_\_\_\_\_ because \_\_\_\_\_  
\_\_\_\_\_ [1]