

Experimental Probability

Week 4

Lesson Time : 20 - 25 Minutes

Course : Foundation or Higher

Grade : 4

Back to Basics

Core

Let's Do It!

GCSE Revision Video 19

- **Prior Checklist:** A pack of A5/A6 revision cards.

A pen.

- **Our Video Structure:**

Back to Basics: Quick re-cap.

Core: *Create* your own revision cards with exam style questions.

Let's Do It! : *Apply* your revision cards to another set of exam style questions.

Instructions: **Print out** this worksheet and watch the revision video simultaneously.

Pause and Play the video unlimited times to review your work and write the answers in the blank spaces. Once you have written your answers, check these with the tutorial answers, as explained in the video.


Create your OWN revision cards when prompted on the worksheet(Back to Basic and Core sections).

Apply your OWN revision cards (Let's Do It! section).

Self Assess yourself (Out of 10) on your revision planner after you have completed the revision video.

WATCH this revision video and **MANY** others on our **FULL** courses at www.mathsmemory.co.uk

Let's get started and create our Master revision card with this suggested template.



Maths Memory

Learn:

- Calculating probabilities
- Using ratios
- Two way tables

Topic: Experimental probability

Date/week: _____

GRADE

4/5

Step 3

Step 2

Step 1

Example(s):

Back to Basics- Starter questions to warm you up



Back to Basics

Topic: Experimental Probability

Question 1

A four sided spinner is spun.

The table below shows the probabilities that the spinner will land on a 1, 2 and 4.

Number	1	2	3	4
Probability	0.3	0.15		0.25

The spinner is spun once.

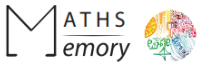
a) Work out the probability that the spinner will land on a 3.

Adam is going to spin the spinner 80 times.

b) Work out an estimate for the number of times the spinner will land on a 3.



Core- Create your revision cards with these exam style questions



Core 1

Topic: Experimental Probability

Question 1

The table below shows the probabilities that a biased dice will land on a 1,2,3,4 or 6.

Number	1	2	3	4	5	6
Probability	0.25	0.12	0.13	0.25		0.15

Carol rolls the biased dice 120 times.

a) Work out an estimate for the total number of times the dice will land on a 4 or a 5.

Grade

4 (3 Marks)

Let's get our revision card and create Section A. Look at video for guidance.



Core 2

Topic: Experimental Probability

Question 2

The table below shows the probability of taking at random coloured marbles from a box.

Colour	Red	Blue	Yellow	Green
Probability	0.3	0.25		

The ratio that Amanda will pick a yellow marble to a green counter is 2:3

a) Work out an estimate for the probability of picking a green marble.

b) There are 50 blue marbles in the box.
Work out the number of yellow marbles in the box.

Grade

5 (4 Marks)

Let's get our revision card and create Section B. Look at video for guidance



Challenge

Topic: Experimental Probability

Question 3

Kaylun throws a biased coin 20 times. He gets 13 tails.

Mark throws a biased coin 25 times. He gets 16 tails.

Isabelle throws a biased coin 5 times. He gets 3 tails.

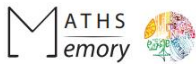
- a) Whose result will give the better estimate for the probability that the coin will land on tails.
- b) Layla throws the coin once. Use Kaylun's, Mark's and Isabelle's results to work out an estimate that Layla will get tails.
- c) After the first throw, Layla throws the coin the second time. Hence(using part (b)), work out the probability that she would have thrown a tail on the first attempt and a head on the second attempt.

Grade

5 (5 Marks)



Let's Do It!- Apply your revision cards to another set of exam style questions



Let's Do It !

Topic: Experimental Probability

Question 1

The table below shows the probability of taking coloured sweets from a bag. Billy is going to take at random a sweet from the bag.

Colour	Purple	White	Orange
Probability	0.1		

The probability that the sweet Billy takes will be white is twice the probability that it will be orange.
a) Work out an estimate for the probability of picking a white sweet.

There are 5 purple sweets in the box.
b) Work out the number of orange sweets in the bag.

Grade

5 (4 Marks)



Question 2

Tony throws a pin head 40 times. It lands point up 28 times
Alga throws a pin head 50 times. It lands point up 32 times

- a) Whose result will give the better estimate for the probability that the pin will land heads up?
- b) Simon throws the pin head once. Use Tony and Alga's results to work out an estimate that Simon will get a point up.
- c) Simon throws a pin head 100 times. He gets point down 35 times.
He says ' the probability of getting a point down for myself is the same as for Tony and Alga'.
Is Simon correct?

Grade

5 (5 Marks)

Congratulations. You have completed this topic.

Now go back to your revision planner and rate yourself out of 10.