







AC9M6P02

**UNDERSTANDING CHANCE EXPERIMENTS** TRUE OR false

PROBLEM CARDS

In this chance experiment, you have a 50/50 chance of picking a white marble		In this chance experiment, you have a 2 in 3 chance of picking a white marble	
In this chance experiment, both colours have the same chance of being picked		In this chance experiment, both colours have the same chance of being picked	
In this chance experiment, you are unlikely to pick a black marble		In this chance experiment, you are very likely to pick a white marble	

# CONDUCTING CHANCE EXPERIMENTS

Keep scrolling to see what's included!

# LOOKING FOR AN ENGAGING WAY TO TEACH STUDENTS HOW TO RUN CHANCE EXPERIMENTS?



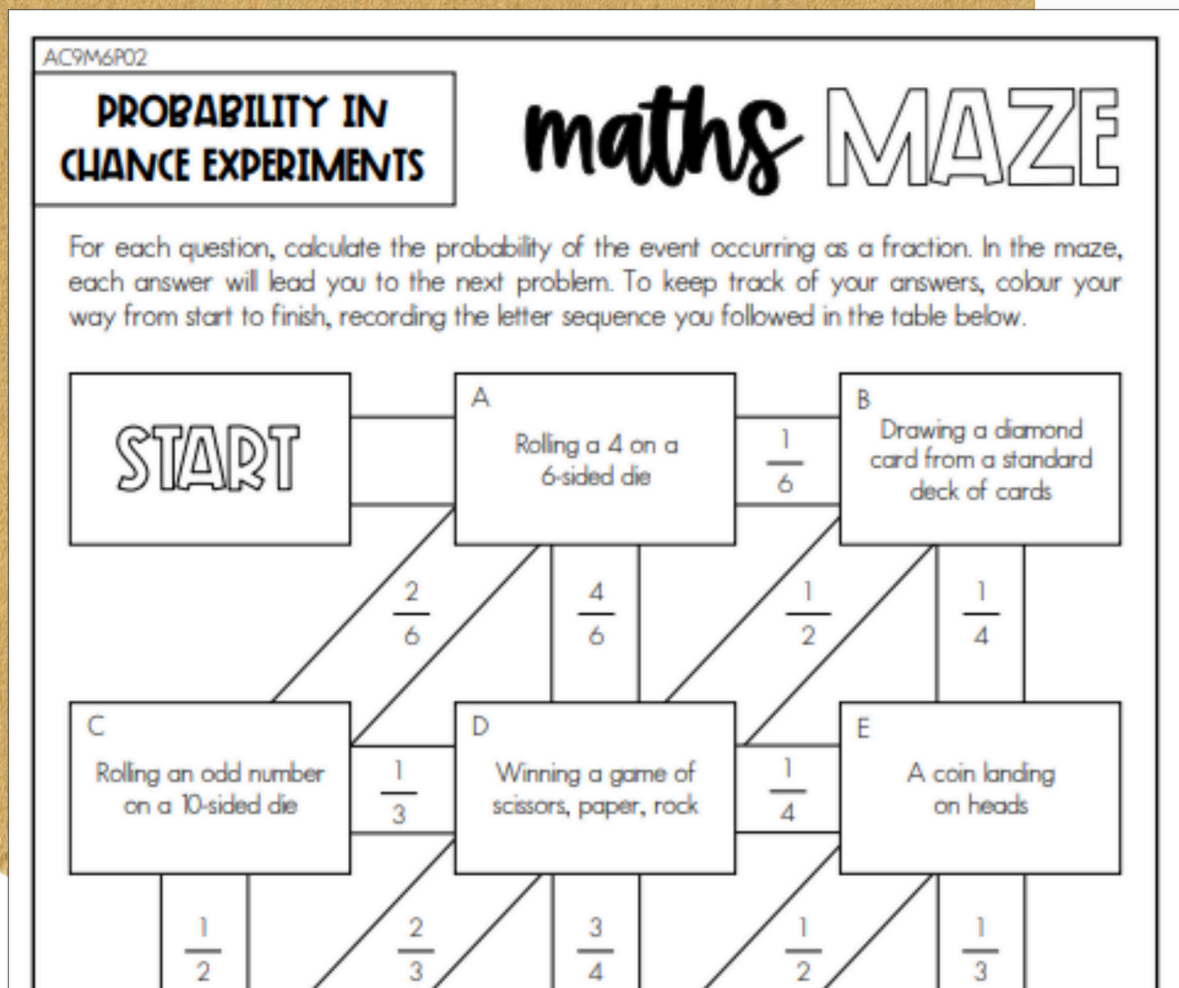
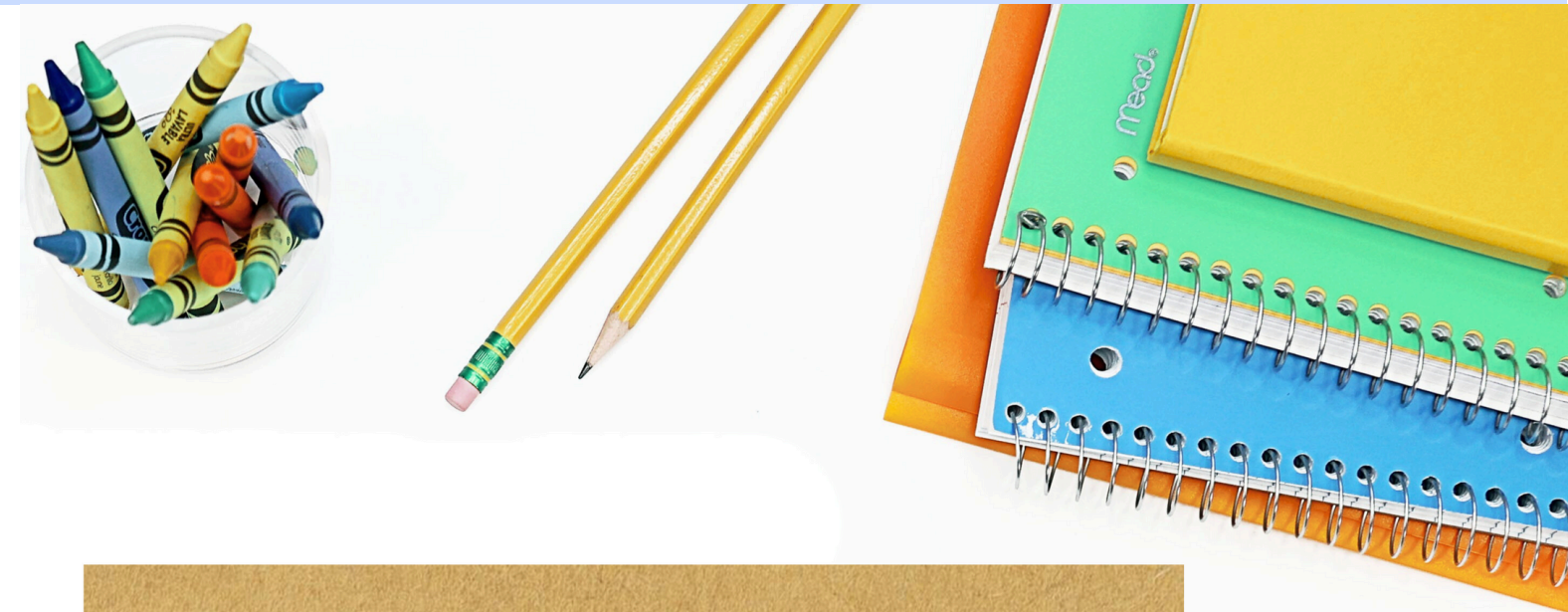
All six activities are aligned to the outcome: **(AC9M6P02)**



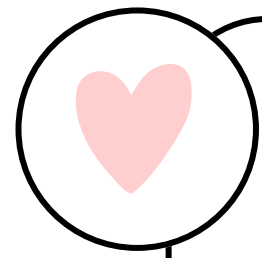
Tasks range in difficulty from easy to challenging!



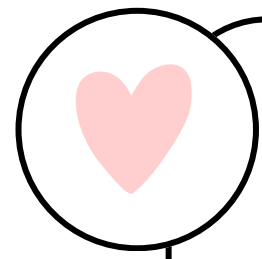
Activities are interactive, hands-on, and FUN!



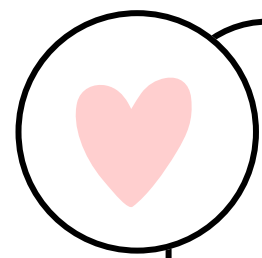
# LOOKING FOR AN ENGAGING WAY TO TEACH STUDENTS HOW TO RUN CHANCE EXPERIMENTS?



NO planning required for outcome **AC9M6P02**



No prep, just print and go!



Aligns perfectly to the **Year 6 Statistics & Probability Assessment Pack!**



AC9M6P02

**CONDUCTING CHANCE EXPERIMENTS** **SUPER sort**

Read the chance experiment, then find that card that shows the expected result based on probability. Underneath, write a short explanation for why this is the expected result. Once you've completed the middle column, conduct the chance experiment and record your actual results using tally marks. Underneath, reflect on the expected result and the actual result, were they the same or different?

AC9M6P02

**CONDUCTING CHANCE EXPERIMENTS** **SUPER sort**  
PROBLEM CARDS

Experiment	Expected Result	Why?
Select 10 cards from a deck	Glue	

5 will be red and 5 will be black **A**

6 will be red and 4 will be black **B**

I will win every game **C**

I will win one game, lose one game and tie another game **D**

# INCLUDES ALL THESE AND MORE!


AC9M6P02

**UNDERSTANDING CHANCE EXPERIMENTS**

TRUE OR FALSE


PROBLEM SOLVING

In this chance experiment, you have a 50/50 chance of picking a white marble




In this chance experiment, you have a 2 in 3 chance of picking a white marble


In this chance experiment, both colours have the same chance of being picked



In this chance experiment, you are unlikely to pick a black marble



In this chance experiment, you're twice as likely to get a black marble as a white one.



AC9M6P02

**CHANCE EXPERIMENT PROBLEM SOLVING**

**WOULD YOU RATHER...**

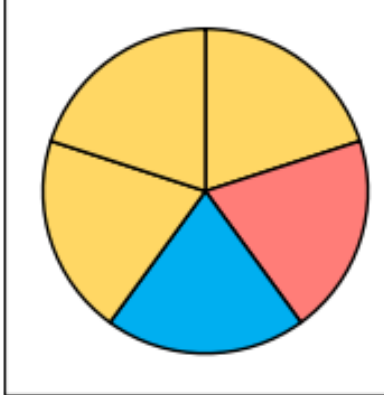
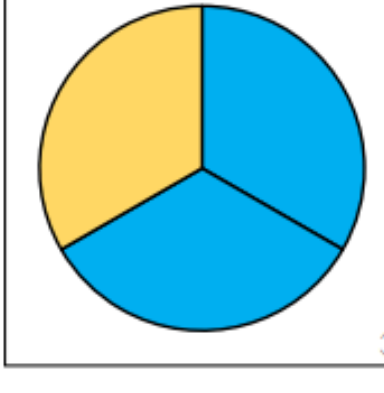
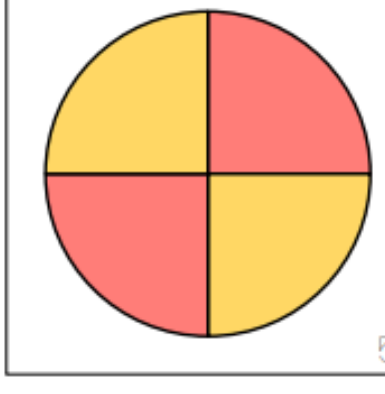
Read the word problems then colour the box to show if you would rather option A or option B. Explain your thinking behind each decision.

WOULD YOU RATHER...	OPTIONS	WHY?
A	Win a prize by drawing a diamond card from a deck	
B	Win a prize by rolling a dice and landing on an even number	
A	Play a chance game where you win by rolling a number >4	
B	Play a chance game where you must draw a red card from a deck	
A	Flip a coin twice and try to get heads both times	
B	Roll a 6-sided die once and try to land on the number 2	
A	Run a chance experiment where you draw 10 cards from a deck without putting them back	
B	Run a chance experiment where you draw 10 cards and return each one after every draw?	

AC9M6P02

**UNDERSTANDING CHANCE EXPERIMENTS**

MATHS MATCH

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**CHANCE EXPERIMENT PROBLEM SOLVING**

**THINKER'S KEYS**

**THE ALPHABET KEY**  
List as many words as you can from A to Z that relate to chance experiments and probability

**THE ANSWER KEY**  
If 0.8 is the answer, what might the chance experiment be? Provide 10 possible answers.

**THE BRAINSTORMING KEY**  
Brainstorm all the real life situations where you would need to calculate the probabilities of events

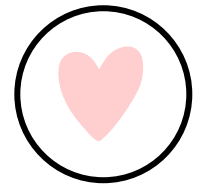
**THE VARIATIONS KEY**  
Robyn wants to create a chance experiment using a spinner with 10 sections. She wants players to be twice as likely to land on red as on yellow, and for green and pink to have an equal chance. Think of at least 5 different ways the spinner could be coloured to show this probability.

**THE CONSTRUCTION KEY**  
Create a game where you are 3 times more likely to win than the person you play with. When the game is finished, test it to see if you actually win 3x more than your opponent.

**THE INTERPRETATIONS KEY**  
A student thinks there's a 50% chance of flipping heads two times in a row. Create a tree diagram to show why this is incorrect

# CONTENTS

## What's included in this pack?



**SIX** engaging activities for the outcome **AC9M6P02**:

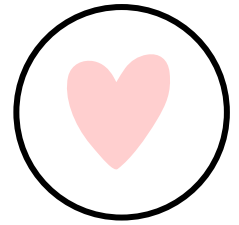
- + True or False
- + Maths Match
- + Super Sort
- + Maths Maze
- + Would You Rather?
- + Thinker's Keys



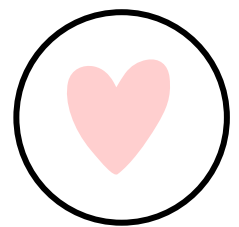
**Answer Key for teachers**



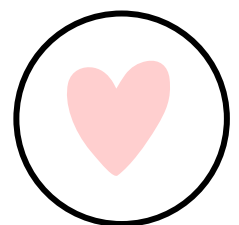
# HOW YOU CAN USE THIS RESOURCE




**Differentiate with ease** by supporting all ability levels using simple to challenging activities.



Explore chance experiments through class, group, or centre tasks and **bring probability to life.**



**Check understanding** with the included **answer key** and **ready-to-go activities.**



AC9M6P02

**CHANCE EXPERIMENT  
PROBLEM SOLVING**

## WOULD YOU rather...

Read the word problems then colour the box to show if you would rather option A or option B. Explain your thinking behind each decision.

	OPTIONS	WHY?
A	Win a prize by drawing a diamond card from a deck	
	OR	
B	Win a prize by rolling a dice and landing on an even number	
	OR	
A	Play a chance game where you win by rolling a number $>4$	
	OR	
B	Play a chance game where you must draw a red card from a deck	
	OR	
A	Flip a coin twice and try to get heads both times	
	OR	
B	Roll a 6-sided die once and try to land on the number 2	
	OR	

# LOOKING FOR MORE?



Want to take Chance Experiments further? Pair this pack with the **Year 6 Statistics & Probability Pre- and Post-Test Pack** for ready-to-go assessments and automatic growth tracking!

**YEAR 6**

## STATISTICS & PROBABILITY TEST PACK

THE SYDNEY TEACHER

The preview shows two pages from the test pack. The top page is titled 'STATISTICS' and includes a 'POST TEST' section with a line graph showing temperature over time. The bottom page is titled 'PROBABILITY' and includes a 'POST TEST' section with a table of chance experiments and a jar of marbles.

Rolling 2, 5 or 6 on a 6-sided die	Drawing a black card from a standard deck	Drawing a heart card from a standard deck	A coin lands on tails	Losing scissors, paper, rock

10 PRINTABLE TESTS