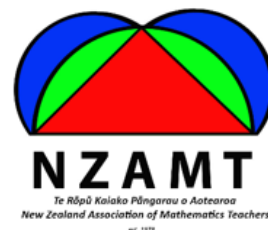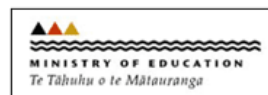# Maths Week/Pāngarau Wiki 2025

Daily Dollar/Ko te Tāra o te Rā

Bill Ellwood Memorial Series

This series is a tribute to Bill Ellwood, who wrote much of the Maths Week material from 2006 to 2019. Bill passed away in June 2021.

Set D Day 4

For students

WHAT TO DO FOR STUDENTS

1 You may work on your own or with someone else, and your teacher or someone else can help you.

2 Answer the questions.

3 Each question has a dollar value. Each day's questions total $100 in value.

4 When you have answered the questions, your teacher will give you the answers.

5 If you are right, you will get the dollar value for each question. You then you can work out how many dollars you have earned for the day.

6 Add the number of dollars you have earned each day in the Daily Dollar questions and get a total for the week. Then you can compare your total for the week with others in your class.

7 Perhaps your teacher may award a prize for the highest total for the week!

8 Good luck!
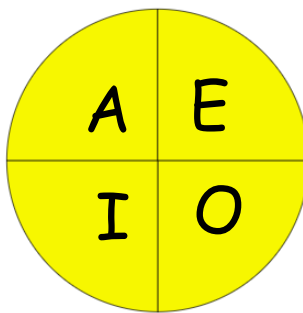
PROBABILITY – SPINNING FOR WORDS

Question 1   ($10)

Kiri and Jaxon have invented a game to play using three spinners. The three spinners have letters on them, the first and the third spinners have consonants, and the second spinner has vowels. Each spinner is spun once, and the three letters, in order, form a "word".
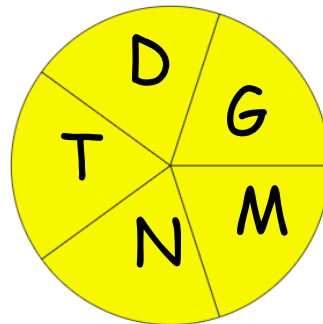
How many words are possible?
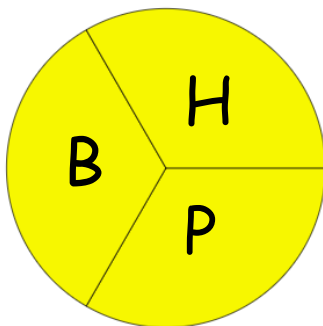
Spinner 1   Spinner 2   Spinner 3

Question 2 ($40)

Kiri and Jaxon want to know how many of the "words" generated by the spinners are actually words, that is words that we would find in a dictionary. Help them find out by completing the table below.

a) The words starting with B have been listed, complete the other two shaded columns for three-letter words starting with H and three-letter words starting with P. Try to be systematic about writing the words down.

b) Complete the non-shaded columns in the table to decide if the three-letter word is an actual word.

| Words starting with B	Tick if an actual word	Words starting with H	Tick if an actual word	Words starting with P	Tick if an actual word
BAD					
BAG					
BAM					
BAN					
BAT					
BED					
BEG					
BEM					
BEN					
BET					
BID					
BIG					
BIM					
BIN					
BIT					
BOD					
BOG					
BOM					
BON					
BOT					

Question 3 ($10)

What is the probability that when the three spinners are spun, the "word" they make is an actual word?
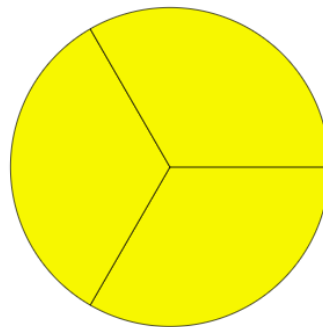
Question 4 ($40)

a) Make up your own spinner combination, like Kiri and Jaxon's, using the three spinners below. Remember the first and third spinner are consonants, and the second spinner is vowels. Use some different consonants to the ones used by Kiri and Jaxon.
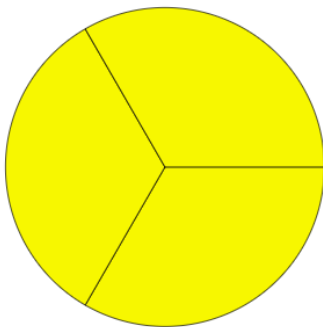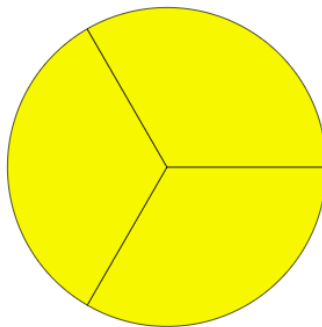
Spinner 1   Spinner 2   Spinner 3

b) List the outcomes and decide how many are actual words.
c) What is the probability of spinning the three spinners and getting an actual word?