BLOOMSM4TH

Makes Maths Fun

Level 2

PROBABILITY

Bloomsmath is a comprehensive mathematics program which provides a fun way for every student to be learning to the best of their ability.

By Rachel McCann (B.Teach; B.Ed Hons; M.ED (Special Ed.)

BLOOMSM4TH Makes Maths Fun

Level 2

Probability

Level 2 is designed for students in their second year at school often called Year 1. The Probability strand allows students to recognise and describe the elements of chance in everyday events.

Knowledge: Students complete a number of activities in which they match the likelihood of events happening with choices between will and wil not; might and might not and is and is not.

Students who demonstrate proficiency in this activity move on to Comprehension.

STOP

Students stop here as they require additional teacher support to master this activity.

Comprehension: Students are given three scenarios with pictures and must answer questions about the information provided and the chance that various outcomes can occur based on the information given.

Students who demonstrate proficiency in this activity move on to Application.

STOP

Students stop here if time has run out or they require additional support with this activity.

Application: Students are given a number of statements and must choose whether each is likely to occur, unlikely to occur or impossible because it can not occur.

Students who demonstrate proficiency in this activity move on to Analysis.

STOP

Students stop here if time has run out or they require additional support with this activity.

Analysis: Students are given a number of coins which they must convert into a column graph and then answer questions about the data.

Students who demonstrate proficiency in this activity move on to Synthesis.

STOP

Students stop here if time has run out or they require additional support with this activity.

Synthesis: Students predict which number they will roll on a die and then roll it. They do this 20 times to see if changing their guess changes their likelihood of winning and which numbers occur most and least often.

Evaluation: Suggested questions provide a starting point for discussions related to Probability.

Students may complete more or fewer activities for each learning outcome depending on the time allocated and their strength in the area being covered.

All students should participate in the Evaluation discussion to encourage the use of mathematical language, logical reasoning and reflection on that which they have completed.

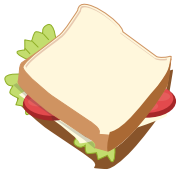
Name: _____

Will It Happen?

Choose the likelihood of each event happening.

It is raining now / It is not raining now
It did rain today / It did not rain today
It will rain today / It will not rain today
It might rain today / It might not rain today

I am eating food now / I am not eating food now
I have eaten food today / I have not eaten food today
I will eat food today / I will not eat food today
I might eat food today / I might not eat food today



I will do maths today / I won't do maths today
I have done maths today / I have not done maths today
I might do maths today / I might not do maths today
I am doing maths now / I am not doing maths now

Choose the appropriate phrase for each sentence.

I can / can not tie my shoelaces
I am / am not an adult
I do / do not attend school
I can / can not count to ten

Write your own phrase into the blank section of each sentence

I _____ walk to school

I _____ walk home from school this afternoon

It _____ hot today

It _____ hot yesterday

Let's Try This Again

Progress To Comprehension

PB 2 KN

Probability - Level 2 - Students will recognise & describe the elements of chance in everyday events.

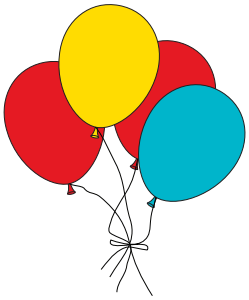
Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

BLOOMSMATH

Name: _____

What Are The Chances?

Mark has 4 balloons.



How many are red? _____

How many are yellow? _____

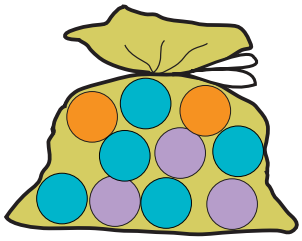
How many are blue? _____

If one balloon popped which colour is it most likely to be? _____

Can Mark give away a blue balloon? _____

Could Mark give away a green balloon? _____

Sue has some marbles in a bag.



How many are blue? _____

How many are purple? _____

How many are orange? _____

Which colour is Sue most likely to draw from the bag? _____

Which colour is Sue least likely to draw from the bag? _____

What colour marble could Sue not draw from the bag? _____

Bill bought a tray of cupcakes.

How many are chocolate? _____

How many are strawberry? _____

Which flavour is Bill's favourite? _____

Can Bill choose a banana flavoured cup cake? _____

Let's Try This Again

Progress To Application

PB 2 CP

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

Probability - Level 2 - Students will recognise & describe the elements of chance in everyday events.

BLOOMSMATH

Name: _____

Likely, Unlikely Or Impossible.

Choose the best answer for each statement - likely, unlikely or impossible.

1. Bill has 4 hens and collected 3 eggs.	likely	unlikely	impossible
2. Mary is having a birthday and got 5 presents.	likely	unlikely	impossible
3. Jim is 5 and drove himself to school today.	likely	unlikely	impossible
4. John slept in and missed the bus yesterday.	likely	unlikely	impossible
5. Your Mum will win $5000 tomorrow.	likely	unlikely	impossible
6. Your dog will eat your homework tonight.	likely	unlikely	impossible
7. You would love a chocolate bar right now.	likely	unlikely	impossible

Provide 2 sentences for each category below.

Likely to happen today:

* _____
* _____

Unlikely to happen today:

?

* _____
* _____

Impossible to happen today:

* _____
* _____

Knowledge
Comprehension
Application
Analysis
Synthesis
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Probability - Level 2 - Students will recognise & describe the elements of chance in everyday events.

BLOOMSM4TH

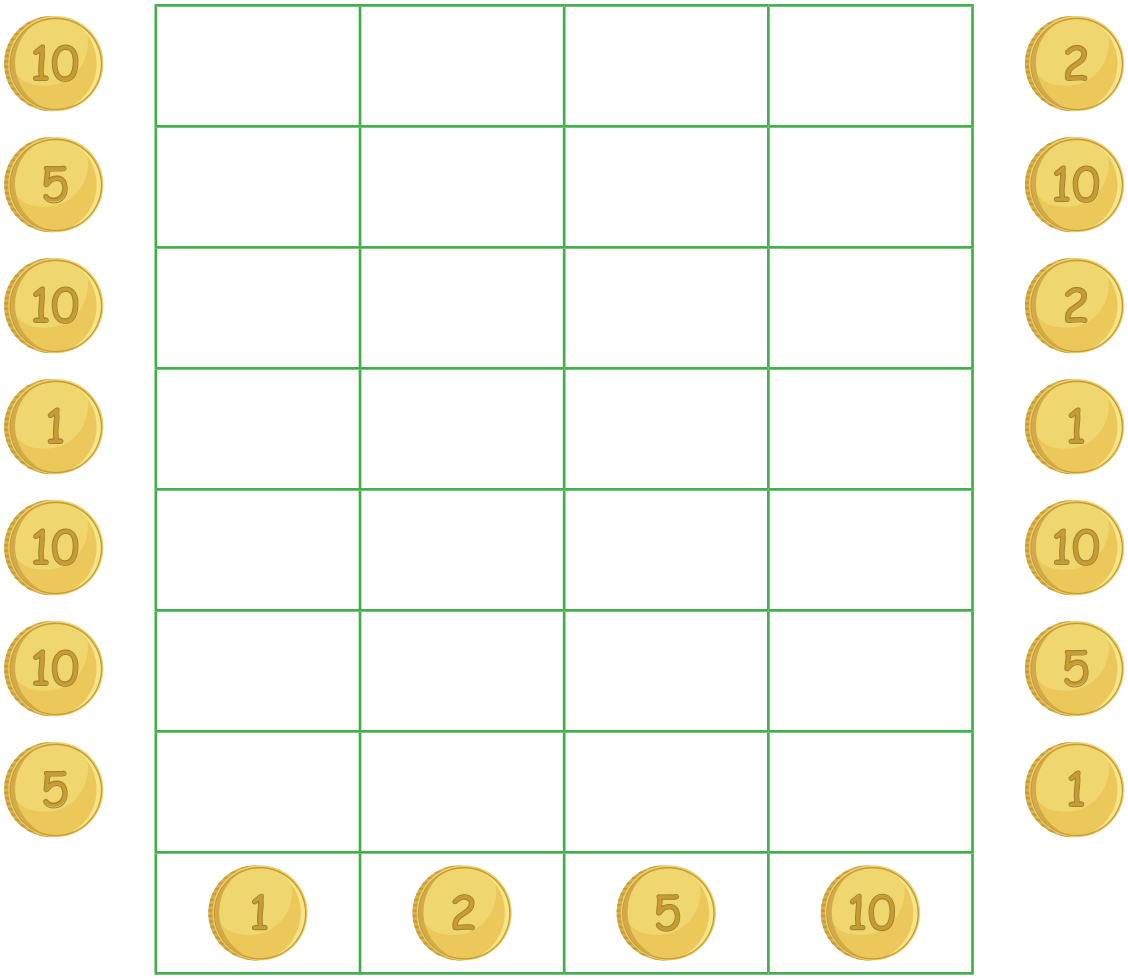
Let's Try This Again

Progress To Analysis

Name: _____

Graphing And Probability

Jim's wallet contained a number of coins. Graph them onto the grid and then answer the questions below.



1. How many coins does Jim have in his wallet? _____
2. If Jim pulled a coin out what is the chance of it being a 5c? _____ / _____
3. If Jim pulled a coin out what is the chance of it being a 10c? _____ / _____
4. If Jim pulled a coin out what is the chance of it being a 20c? _____ / _____
5. Which of the 4 coins is Jim least likely to pull out of his wallet? _____
6. Which of the 4 coins is Jim most likely to pull out of his wallet? _____

 Let's Try This Again  Progress To Synthesis

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

Probability - Level 2 - Students will recognise & describe the elements of chance in everyday events.

BLOOMSMATH

Name: _____

Roll and See

In pairs students roll one die 20 times and predict what the outcome will be.

Player 1

Predict	Roll

Predict	Roll

Player 2

Predict	Roll

Predict	Roll

1. Which number was rolled most often? _____
2. Which number was rolled least often? _____
3. Did changing your predicition change the result? _____
4. If you were only allowed to choose one number for all 20 rolls what would you now choose? _____

Let's Try This Again

Progress To Evaluation

Probability Discussion

The following questions and activities are provide as a starting point for fun discussions related to Probability. During these conversations students will have an opportunity to use appropriate mathematical language in its correct context, to engage in reflection on the Probability activities they have completed and to use logical reasoning to tie their in-class mathematics to its everyday context.

Have students create a list of probability equivalent terms ie. definitely, can, will, does and is; probably, might, may, could and should and impossible, can not, does not, will not and is not etc.

Create a bag of coins, marbles, shapes or pencils and have students predict what you will pull out, what you could not pull out and the likelihood of an item being pulled out based on what is in the bag.

Show students fractional probability where the number of an item in the data set is the numerator and the total number of items in the set is the denominator and have them give the probability of things occurring ie. a student chosen is a girl 14/27, a school table is bright pink 0/15 etc.

Play Heads and Tails where students put their hands on their head or their bottom and are eliminated depending on the result of a tossed coin and their choice.

Play 6 parts where students select a number from 1 to 6 and hold up that many fingers. A die is rolled and only students holding up the correct number of fingers stay standing. Discuss how much quicker this eliminates students than Heads and Tails and why this is the case.

Play 6 parts a few times and see if students can work out which number they are best off selecting or do all numbers occur equally?