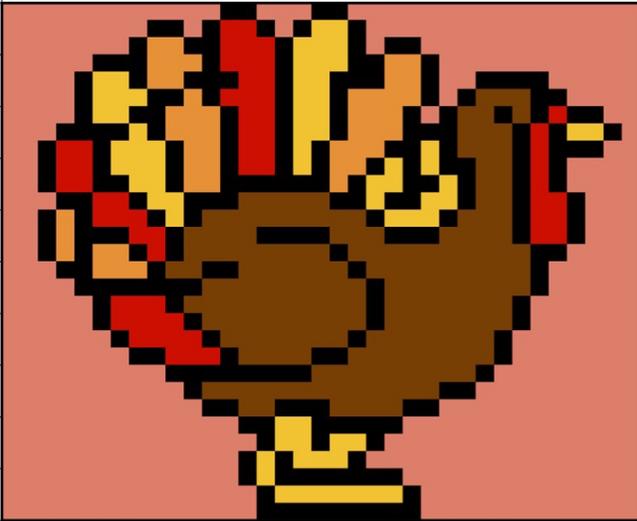


keep scrolling to get
a sneak peek!

Help your math students practice
calculating simple probability
given a real-world scenario.
Students will be eager to get the
self-checking benefits from this
digital pixel art activity!

SIMPLE PROBABILITY

#	In a bag of 15 marbles, 4 are green, 1 is red, 5 are yellow, 3 are blue, and 2 are purple.	Directions: Identify the probability of each event. Type your answer as a fraction. Answer each question correctly and pixels will appear to reveal a picture!
1	What is the probability of randomly selecting a yellow marble?	
2	What is the probability of randomly selecting a green marble?	
3	What is the probability of randomly selecting a red marble?	
4	What is the probability of randomly selecting a purple marble?	
5	What is the probability of selecting a blue marble?	
6	What is the probability of randomly selecting a green or a yellow marble?	
7	What is the probability of selecting a red or a yellow marble?	
8	What is the probability of selecting a blue or a green marble?	
9	What is the probability of selecting a black marble?	
10	What is the probability of selecting a red, blue, or yellow marble?	

(c) Malia Rivera 2020

© Malia Rivera, 2024

Math
with Ms. Rivera

Self-Checking

Why do you need this?



It's self-checking! Your students will instantly know if they are correct or not.



Help your students practice this essential math skill.



Your students will be so engaged trying to figure out what the picture is!

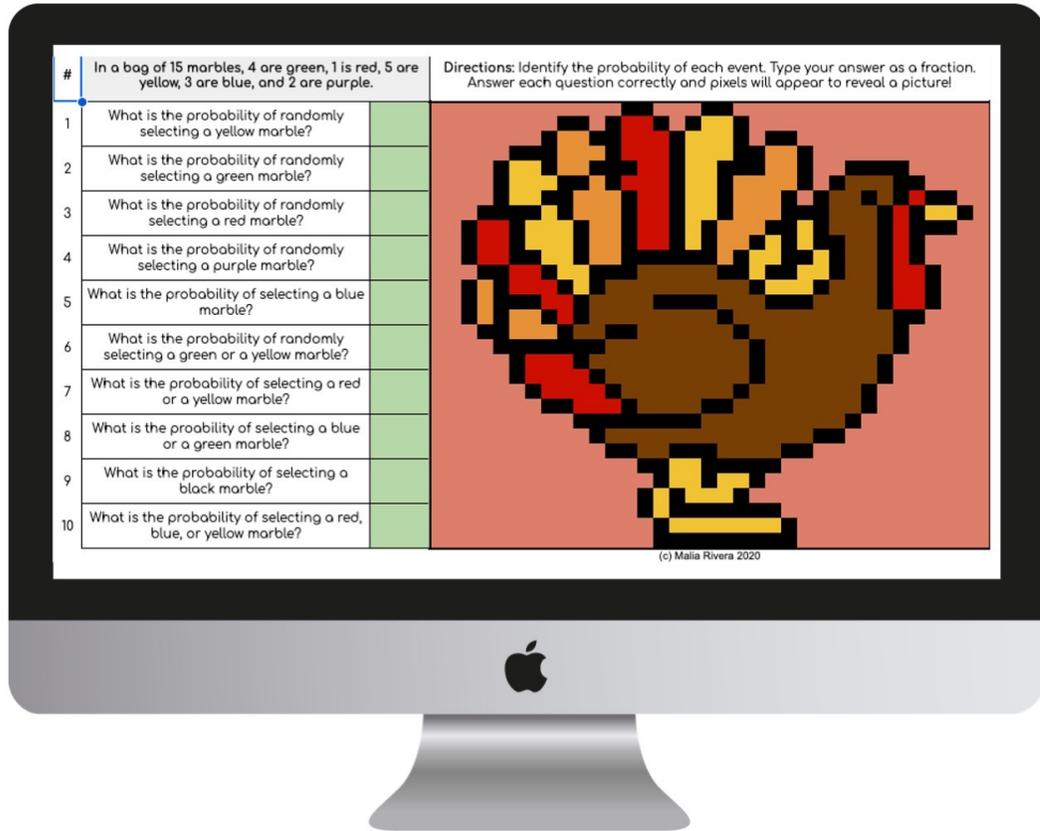
Simple Probability Pixel Art

#	In a bag of 15 marbles, 4 are green, 1 is red, 5 are yellow, 3 are blue, and 2 are purple.	Directions: Identify the probability of each event. Type your answer as a fraction. Answer each question correctly and pixels will appear to reveal a picture!
1	What is the probability of randomly selecting a yellow marble?	<input type="checkbox"/>
2	What is the probability of randomly selecting a green marble?	<input type="checkbox"/>
3	What is the probability of randomly selecting a red marble?	<input type="checkbox"/>
4	What is the probability of randomly selecting a purple marble?	<input type="checkbox"/>
5	What is the probability of selecting a blue marble?	<input type="checkbox"/>
6	What is the probability of randomly selecting a green or a yellow marble?	<input type="checkbox"/>
7	What is the probability of selecting a red or a yellow marble?	<input type="checkbox"/>
8	What is the probability of selecting a blue or a green marble?	<input type="checkbox"/>
9	What is the probability of selecting a black marble?	<input type="checkbox"/>
10	What is the probability of selecting a red, blue, or yellow marble?	<input type="checkbox"/>



(c) Malia Rivera 2020

Simple Probability Pixel Art includes:



- ✓ 10 self-checking problems
- ✓ an answer key
- ✓ a self-checking version
- ✓ an assessment version

Simple Probability Pixel Art

standards covered:

CCSS: 7.SP.C.5, 7.SP.C.6, 7.SP.7a

TEKs: 7.6.E

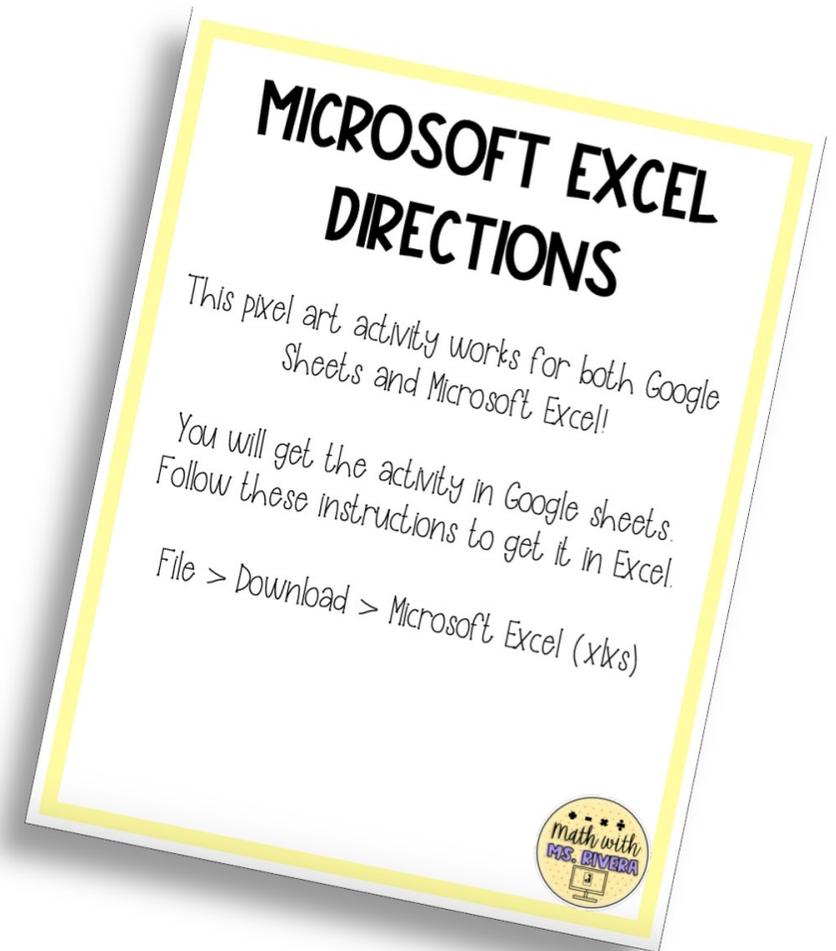
VA SOLs: PS.7.8.a, PS.8.11.b

#	In a bag of 15 marbles, 4 are green, 1 is red, 5 are yellow, 3 are blue, and 2 are purple.	Directions: Identify the probability of each event. Type your answer as a fraction. Answer each question correctly and pixels will appear to reveal a picture!
1	What is the probability of randomly selecting a yellow marble?	
2	What is the probability of randomly selecting a green marble?	
3	What is the probability of randomly selecting a red marble?	
4	What is the probability of randomly selecting a purple marble?	
5	What is the probability of selecting a blue marble?	
6	What is the probability of randomly selecting a green or a yellow marble?	
7	What is the probability of selecting a red or a yellow marble?	
8	What is the probability of selecting a blue or a green marble?	
9	What is the probability of selecting a black marble?	
10	What is the probability of selecting a red, blue, or yellow marble?	

(c) Malia Rivera 2020

Simple Probability Pixel Art

Can be used with Google Sheets
and Microsoft Excel
Directions included!



how to use this resource

#	In a bag of 15 marbles, 4 are green, 1 is red, 5 are yellow, 3 are blue, and 2 are purple.	Directions: Identify the probability of each event. Type your answer as a fraction. Answer each question correctly and pixels will appear to reveal a picture!
1	What is the probability of randomly selecting a yellow marble?	
2	What is the probability of randomly selecting a green marble?	
3	What is the probability of randomly selecting a red marble?	
4	What is the probability of randomly selecting a purple marble?	
5	What is the probability of selecting a blue marble?	
6	What is the probability of randomly selecting a green or a yellow marble?	
7	What is the probability of selecting a red or a yellow marble?	
8	What is the probability of selecting a blue or a green marble?	
9	What is the probability of selecting a black marble?	
10	What is the probability of selecting a red, blue, or yellow marble?	

(c) Malia Rivera 2020

This is a great activity to use when reviewing how calculate a simple probability given a scenario.

It can be used right after teaching the concept or as homework.

This is also a **substitute-friendly** assignment!

You may also enjoy ...

BASIC PROBABILITY

Algebra 2 Guided Notes

BASIC PROBABILITY

Experimental Probability: Probability determined based on a series of trials.

Theoretical Probability = $\frac{\text{Number of Favorable Outcomes}}{\text{Total Number of Possible Outcomes}}$

Directions: Find the experimental probability of each scenario.

1. You spin an equally sectioned 4-sectioned spinner 40 times. Based on the table of results, what is the experimental probability the spinner lands on yellow?

Blue	Red	Yellow	Green
15	3	10	12

theoretical probability = $\frac{1}{4}$

Blue: $\frac{15}{40} = \frac{3}{8}$

Red: $\frac{3}{40}$

Yellow: $\frac{10}{40} = \frac{1}{4}$

Green: $\frac{12}{40} = \frac{3}{10}$

2. You roll a 6-sided die 72 times. Based on the table of results, what is the experimental probability the die lands on a 1?

1	2	3
7	17	12

theoretical probability = $\frac{1}{6}$

1: $\frac{7}{72}$

2: $\frac{17}{72}$

3: $\frac{12}{72} = \frac{1}{6}$

4: $\frac{10}{72} = \frac{5}{36}$

5: $\frac{8}{72} = \frac{1}{9}$

6: $\frac{5}{72}$

with Ms. Rivera

Answer key included

© Malia Rivera, 2024

COMPOUND PROBABILITY

Algebra 2 Guided Notes

COMPOUND PROBABILITY

When one event does not affect the outcome of the other event, the events are independent.

$P(A \text{ and } B) = P(A) \cdot P(B)$

When one event affects the outcome of the other event, the events are dependent.

$P(A \text{ and } B) = P(A) \cdot P(B|A)$

When one event does not affect the outcome of the other event, the events are independent.

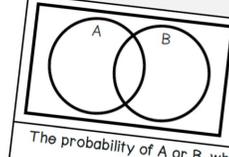
When one event affects the outcome of the other event, the events are dependent.

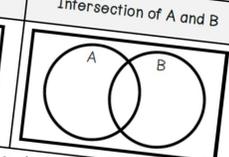
PROBABILITY OF DISJOINTS & OVERLAPPING EVENTS

Compound Event: The _____ or _____.

Overlapping Events: Two events that have _____ in common.

Mutually Exclusive Events: Two events that have _____ outcomes in common.

Union of A and B: 

Intersection of A and B: 

The probability of A or B, when A and B are any two events: $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$

The probability of A and B, when A and B are any two events: $P(A \text{ and } B) = P(A) \cdot P(B)$ (if independent)

with Ms. Rivera

Answer key included

© Malia Rivera, 2024

Free Algebra Activities!

When you join my email list, I'll send you a free Algebra print & digital self-checking activities. There is an Algebra 1 and Algebra 2 version!

You'll also be getting exclusive freebies and content to help your Algebra students be successful this school year!

check it out!

Answer Key
Name: _____ Date: _____
ADDING & SUBTRACTING RATIONAL EXPRESSIONS
Directions: Simplify each rational expression. Show your work.

Solving Systems of Equations
Name: _____ Date: _____
SOLVING SYSTEMS OF EQUATIONS
Directions: Solve each system of equations using substitution or elimination. Check your solution.

Multiplying & Dividing Rational Expressions
Name: _____ Date: _____
MULTIPLYING & DIVIDING RATIONAL EXPRESSIONS
Directions: Multiply or divide the rational expressions. Show your work.

Rational Expression Operations - Addition & Subtraction
Directions: Answer each question and type the question number with the matching answer in the answer column to the right.

#	Question	Answer	Type the matching question numbers here
1	$\frac{5}{x} + \frac{3}{x+1}$	$\frac{2x+1}{x+2}$	
2	$\frac{2}{x+4} - \frac{x^2}{x^2-16}$	$-\frac{1}{x^2-1}$	
3	$\frac{x+2}{x^2+4x+4} + \frac{2x}{x+2}$	$\frac{2x^2+2x+5}{x^2+x-2}$	
4	$\frac{x}{x-2} + \frac{3}{x-1}$	$-\frac{x^2+2x-8}{x^2-16}$	
5	$\frac{x}{4x+8} - \frac{1}{x^2+2x}$	$\frac{8x+5}{x^2+1}$	
6	$\frac{x+2}{x-1} + \frac{x-1}{x+2}$	$\frac{x^2-3x+7}{x^2-4}$	
7	$\frac{2x+1}{x^2-4} + \frac{x-3}{x+2}$	$\frac{x^2+2x-6}{x^2-3x+2}$	
8	$\frac{x^2+2x}{x^2-1} - \frac{x+1}{x-1}$	$\frac{x-2}{4x}$	

(c) Malia Rivera, 2024



hey there!

My name is Malia and I'm passionate about making learning and practicing math fun. I love creating engaging math resources for my students and I hope your students enjoy this activity too!

Did you know you could get **FREE** money from TPT??

All you need to do is leave feedback on the product after you purchase. [Click here](#) to leave reviews and earn credits towards your next TPT purchase!

let's connect!



Follow my TPT store



Follow my Instagram



Email me