Grade 7
Math Remote Learning Assignments
Week 3: April $6^{\text {th }}-$ April $10^{\text {th }}$

| Day | Assignments |
| :---: | :---: |
| Monday 4/6/2020 | Part A: Watch Video \& Guided Practice <br> Part B: Solve problems Independently following the SMP <br> Part C: Complete the Exit Ticket using this Illuminate link <br> Part D: Fluency Practice |
| Tuesday 4/7/2020 | Part A: Watch Video \& Guided Practice <br> Part B: Solve problems Independently following the SMP <br> Part C: Complete the Exit Ticket using this Illuminate link Part D: Fluency Practice |
| Wednesday 4/8/2020 | Part A: Watch Video \& Guided Practice <br> Part B: Solve problems Independently following the SMP <br> Part C: Complete the Exit Ticket using this Illuminate link <br> Part D: Fluency Practice |
| Thursday 4/9/2020 | Part A: Watch Video \& Guided Practice <br> Part B: Solve problems Independently following the SMP <br> Part C: Complete the Exit Ticket using this Illuminate link Part D: Fluency Practice |
| $\begin{gathered} \text { Friday } \\ \text { 4/10/2020 } \end{gathered}$ | Have a great Spring Break! |

*You must know your ID number in order to submit your answers in Illuminate. If you do not know your ID number, please let your teacher know and they can help you.

## Common Core Aligned Standard: 7.G. 1

Objective: SWBAT solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

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Lesson At-A-Glance for Today
    Watch Video & Guided Practice (about }10\mathrm{ mins)
    Solve problems independently following the SMP (about 25 mins)
    Complete the Exit Ticket (about 10 mins)
    Log onto IXL link (about 15 mins)
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PART A: Guided Practice - Watch the teacher mini-lesson video and/or use the exemplar to follow along to complete the guided practice problem below.

Guided Practice Question:

View question here

Teacher Mini-Lesson Video or Exemplar

View example video here

## Strategic Math Plan:

1. Read and Interpret the Question
2. Make a Plan
3. Solve
4. Check your work


PART B: Independent Practice - Complete the following problems below using the SMP. Khan Academy Video Resources: Example 1 Example 2

1. The GPBXM Student Government held a contest for a new half-court basketball design. The Student Government liked your design, so they have asked you to calculate the actual area of the court in order to estimate the cost of the project. Based on your drawing below, what will the actual area of the planned half-court be?

Scale Drawing: 1 inch on the drawing corresponds to 15 feet of actual length.

2. A drawing of an airplane has a scale of 1 inch being equal to 19 feet.


If the rear wing span on the scale drawing is 2.5 inches long, what is the actual length of the rear wing span in feet?
3. Luca drew and cut out a small right triangle for a mosaic piece he was creating for art class. His mother liked the mosaic piece and asked if he could create a larger one for their living room. Luca made a second template for his triangle pieces.



|  | Height | Base |
| :---: | :--- | :--- |
| Original Image |  |  |
| Second Image |  |  |

Is Luca's enlarged mosaic a scale drawing of the first image? Explain why or why not.

PART C: Exit Ticket - Complete the following problems below using the SMP. Submit your answers online using this Illuminate link.
1.

A jet has a length of $\mathbf{2 4 2}$ feet. Which picture shows a model of the jet built to a scale of 1 inch $=\mathbf{2 2}$ feet?

2. The area of a rectangle is 20 square feet. If a scale factor of 3 is applied to the rectangle to form a new rectangle, what will be its area?
A. 60 square feet
B. 120 square feet
C. 180 square feet
D. 40 square feet

PART D: Fluency - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work.
https://www.ixl.com/math/grade-7/perimeter-and-area-changes-in-scale

## Common Core Aligned Standard: 7.SP. 6

Objective: SWBAT find the probability of an event by observing its long-run relative frequency.

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Lesson At-A-Glance for Today
    Watch Video & Guided Practice (about 10 mins)
    Solve problems independently following the SMP (about 25 mins)
    Complete the Exit Ticket (about }10\mathrm{ mins)
    Log onto IXL link (about 15 mins)
```

PART A: Guided Practice - Watch the teacher mini-lesson video and/or use the exemplar to follow along to complete the guided practice problem below.

Guided Practice Question
View question here
Teacher Mini-Lesson Video or Exemplar
View example video here

## Strategic Math Plan:

1. Read and Interpret the Question
2. Make a Plan
3. Solve
4. Check your work


PART B: Independent Practice - Complete the following problems below using the SMP. Khan Academy Video Resources: Example 1

1. A florist sold bouquets of red roses to 15 of the first 20 customers who came into his shop.

What is the experimental probability that a random customer in that group bought a bouquet of red roses?

## Answer

$\qquad$

Based on the experimental probability, how many bouquets of red roses should the florist expect to sell on a day with 120 customers?

## Show your work.

Answer $\qquad$ bouquets
2. Tatianna is experimenting with the same bag of pens as Sahara. Tatianna conducts 30 trials, and her results are shown in the table below.

| Blue | Black | Red |
| :---: | :---: | :---: |
| 12 | 9 | 9 |

a. Make a prediction for how many times Tatianna would pick a red pen if she conducted 60 trials of the experiment.
b. If Tatianna conducts 60 trials of this experiment, how many more blue pens do you think she will have picked up than black pens? Show your work.
3. Mark rolled one die 50 times, and his results are shown below.

| Outcome | Frequency |
| :---: | :---: |
| 1 | 7 |
| 2 | 9 |
| 3 | 10 |
| 4 | 8 |
| 5 | 13 |
| 6 |  |

a. If Mark rolls the die 200 times, predict the number of times the die will land on six. Show your work.
b. If Mark rolls the die 400 times, predict the number of times the die will land on six. Show your work.
c. Explain why your answers for part (a) and for part (b) are different, despite solving for the probability of the die landing on six in each.

PART C: Exit Ticket - Complete the following problems below using the SMP. Submit your answers online using this Illuminate link.

1. Forty out of 50 people surveyed in a small towns' coffee shop are planning on voting in the next election. If there are 400 people in the town, how many people do you predict will vote in the next election?
a) 8
b) 32
c) 50
d) 320
2. John did an experiment pulling marbles out of a bag, without knowing the contents of the bag. After performing 20 trials, John had pulled 3 red marbles, 11 blue marbles, and 6 orange marbles. How many orange marbles could he expect to pull if he performed a new experiment with a total of 1,000 trials?
a) 3
b) 6
c) 300
d) 600

PART D: Fluency - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work.
https://www.ixl.com/math/grade-7/make-predictions-using-experimental-probability

## Common Core Aligned Standard: 7.SP.7a

Objective: SWBAT Find the probability of an event occurring.

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Lesson At-A-Glance for Today
    Watch Video & Guided Practice (about 10 mins)
    Solve problems independently following the SMP (about 25 mins)
    Complete the Exit Ticket (about }10\mathrm{ mins)
    Log onto IXL link (about 15 mins)
```

PART A: Guided Practice - Watch the teacher mini-lesson video and/or use the exemplar to follow along to complete the guided practice problem below.

Guided Practice
View question here
Mini-Lesson Video or Exemplar
View example video here

## Strategic Math Plan:

1. Read and Interpret the Question
2. Make a Plan
3. Solve
4. Check your work


PART B: Independent Practice - Complete the following problems below using the SMP. Khan Academy Video Resources: Example 1 Example 2

1. There are 5 different color centerpieces that Imani can use for her sweet-sixteen birthday celebration to decorate her tables. The amount of each centerpiece is below.

| Color | Pink | Gold | Purple | Blue | Silver |
| ---: | :---: | :---: | :---: | :---: | :---: |
| Number | 4 | 5 | 10 | 2 | 6 |

a) What is the probability that Imani will choose pink or gold as her centerpiece colors for her party?
b) What is the probability that she will choose Pink, purple, silver, or gold centerpieces?
2. Use the spinner below to answer the following questions.

a. What is the probability of landing on green or purple?
b. What is the probability of landing on yellow or red?
3. The Gator Girls is a soccer team. The possible number of goals the Gator Girls will score in a game and their probabilities are shown in the table below.

| Number of <br> Goals | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Probability | 0.22 | 0.31 | 0.33 | 0.11 | 0.03 |

a. Find the probability that the Gator Girls score more than two goals.
b. Find the probability that the Gator Girls score at least two goals.
c. Find the probability that the Gator Girls do not score exactly 3 goals.

PART C: Exit Ticket - Complete the following problems below using the SMP. Submit your answers online using this Illuminate link.

1. A family hides colored eggs throughout the park for their yearly egg hunt. There are 6 different colors. The amount of each colored egg is shown in the table below.

## Egg Hidden for Egg Hunt

| Color | Number of Eggs |
| :---: | :---: |
| Red | 7 |
| Blue | 15 |
| Green | 8 |
| Purple | 10 |
| Yellow | 5 |
| Orange | 5 |

Based on the data, what is the probability of finding a blue or a yellow egg?
A. $\frac{3}{5}$
B. $\frac{1}{6}$
C. $\frac{2}{3}$
D. $\frac{2}{5}$
2. Using the spinner below, find the probability that the pointer stops on green or blue.

a) $\frac{2}{3}$
b) $\frac{1}{2}$
c) 0.4
d) $25 \%$

PART D: Fluency - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work: Practice on IXL

## Common Core Aligned Standard: 7.SP. 8

Objective: SWBAT find probabilities of compound events using organized lists, tables, tree diagrams, simulation, and/or the product rule.

## Lesson At-A-Glance for Today

Watch Video \& Guided Practice (about 10 mins)
Solve problems independently following the SMP (about 25 mins)
Complete the Exit Ticket (about 10 mins)
Log onto IXL link (about 15 mins)

PART A: Guided Practice - Watch the teacher mini-lesson video and/or use the exemplar to follow along to complete the guided practice problem below.

## Guided Practice Question

## View question here

Teacher Mini-Lesson Video or Exemplar
View example video here

## Strategic Math Plan:

1. Read and Interpret the Question
2. Make a Plan
3. Solve
4. Check your work


PART B: Independent Practice - Complete the following problems below using the SMP. Khan Academy Video Resources: Example 1 Example 2

1. Use the spinner, coin, and dice below to answer the following question.


Determine the probability of flipping a coin and it landing on heads, spinning the spinner and it landing on D , and rolling the number cube and it landing on a four.
2. In a bag, there are 5 red cards and 5 black cards. Julia can win the game she's playing if she picks 3 red cards in a row. Each time she picks, she holds onto the card. What is the probability that Julia will win the game?
3. A bag contains 5 red, 3 brown, 6 yellow, and 2 blue marbles. Once a marble is selected, it is not replaced. Find each probability.
A. P(red then yellow)
B. P(yellow then blue)
C. P(blue, blue, then brown)

PART C: Exit Ticket - Complete the following problems below using the SMP. Submit your answers online using this Illuminate link.

1. There are 6 marbles in a bag. You are going to pick two marbles, one at a time, without replacing the first marble. If there are 4 red marbles and 2 green marbles, what is the probability that you will pull out two red marbles in a row?
a) $\frac{2}{5}$
b) $\frac{1}{3}$
C) $\frac{8}{15}$
d) $\frac{2}{3}$
2. The $7^{\text {th }}$ grade teachers have nominated 12 scholars, 9 boys and 3 girls, to be helpers at the Parent Teacher Conferences. Mr. Rosskamm decides he only needs 4 helpers, so to be fair, he will write each scholar's name on a little piece of paper, put it in a hat, and randomly select 4 names.

Which expression below could be used to find the probability that all the scholars chosen will be boys?
a) $\frac{9}{12} \cdot \frac{9}{12} \cdot \frac{9}{12} \cdot \frac{9}{12}$
b) $\frac{9}{12} \cdot \frac{9}{11} \cdot \frac{9}{10} \cdot \frac{9}{9}$
C) $\frac{9}{12} \cdot \frac{8}{11} \cdot \frac{7}{10} \cdot \frac{6}{9}$
d) $\frac{9}{12} \cdot \frac{8}{12} \cdot \frac{7}{12} \cdot \frac{6}{12}$

PART D: Fluency - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work.
https://www.ixl.com/math/grade-7/probability-of-compound-events

