

Home Learning Activities: Week 6

Grade 6J – Mr. Methot



******This week we are continuing to understand and work with **percents (pourcentages)**. Remember that we can convert between **fractions**, **decimals (nombre décimaux)**, **ratios (rapports)**, and **percents**. Each of these forms represent a part of a whole (1). We can also solve real-life problems involving percents to find a quantity or amount of something. I have provided some explanations and examples in the file named **"Pourcentages 6e Année"**.

******Here are a couple of videos you can watch that will help you further understand **percents (pourcentages)** and **equivalent fractions (fractions équivalentes)**.

<https://www.youtube.com/watch?v=wSVnbruRG60> (La conversion de pourcentages en fractions et en nombres décimaux)

https://www.youtube.com/watch?v=z0g0_qclFOU (Les fractions équivalentes)

******Here is a link that provides a lesson in English on percents as reinforcement. There are videos to watch ("Try This", "What is a Percent?", and "Representing Percents") and practice questions to try. Check out lesson #3.
<https://courseware.cemc.uwaterloo.ca/27?gid=75>

Monday

- **Brainpop:** There are lots of great educational videos and quizzes you can try on www.fr.brainpop.com. Feel free to explore the website as much as you want. You can use my account to gain access. Click on "se connecter" to log in. The username is Mr.Methot and the password is Raiders2020. Check out the subject "**Techno ingénierie**" at the top of the homepage. Then on the next page click on "**Sujets**". Find the topic called "**Les frères Wright**". There is a video you can watch and quiz questions you can try all about the first airplane ever invented!

- **Netmath questions:** Continue with the activities/lessons on www.netmath.ca. Here are the lessons you can focus on this week. If you complete all of these, you can always revisit incomplete lessons from past weeks.

1. Explorer la notation décimale et la notation de pourcentage
2. Associer un nombre décimal ou un pourcentage à une fraction
3. Convertir des nombres en pourcentage
4. Exprimer des situations à l'aide de nombres décimaux et de pourcentages

Bonus 1: Les défis de Sonya - Halloween

Bonus 2: Les défis de Sonya (1)

Tuesday

- **Puzzles + games:** You can always go back and revisit puzzles and games from previous weeks that you enjoyed or want to complete.

1. **Breakout EDU game:** This week you can attempt to solve an online puzzle that requires you to use the clues to unlock a series of digital locks. It is lots of fun! The game focuses on the theme of fractions.

To access the game, you will need to create a student account and join the class I've created. You will find the instructions to create your account in the file titled "**Breakout EDU Account Instructions**". Here is the class code: **P3KS95**. When you need to create a password, my suggestion is to use the same password that you use for Office 365. Once your account is created, you should see that you have joined Classe 6J. Click on the class, and you will see the game that I have assigned for you to play called "Keyla's Carnival Games". For those of you that have already created your class account, use this link to log in: <http://student.breakoutedu.com/login>

If you need some help solving the puzzle, I can provide you with some hints and explanations. I also have access to the combinations for each lock if you are stuck. Once you are finished the game, here are a few reflection questions that you can think about:

- a) When have you encountered something like a number line in real life?
- b) How many fractions can you come up with that are equivalent to $\frac{1}{2}$?
- c) How would you represent a number between 1 and 2 on a number line?

2. **Rock, paper, scissors:** Let's use this classic game that you all know to consider fractions, decimals, and percents! Before playing, decide how many rounds you want to play. You could play for 10, 20, or even 50 rounds if you want. Just for an example, let's say you decide to play 20 rounds with a partner. Before playing, predict how many rounds you think...

- You will win (ex. 7 rounds = $\frac{7}{20} = \frac{35}{100} = 0,35 = 35\%$)
- Your partner will win (ex. 6 rounds = $\frac{6}{20} = \frac{30}{100} = 0,30 = 30\%$)
- You and your partner will tie (ex. 7 rounds = $\frac{7}{20} = \frac{35}{100} = 0,35 = 35\%$)

Take your predictions and find the fraction, decimal, and percent to represent each one, like I have shown above. Now with a partner, actually play rock, paper, scissors for as many rounds as you chose. Keep track of the outcome of each round for who wins and any ties. Once you are finished playing, total up the number of rounds you won, the number of rounds your partner won, and the number of rounds that were tied. With these totals, find the corresponding fraction, decimal, and percent for each one. Then you can compare these results to your initial predictions...

- Did you win a higher percent of rounds than you predicted or a lower percent?

- Did your partner win a higher percent of rounds than you predicted or a lower percent?
- Was there a higher percent of ties than you predicted or a lower percent?
- Were you exact with any of your predictions?

Wednesday

- **STEAM challenge:** Your challenge this week is all about water! You will need to explore and venture outside for a local water source like a river or a stream to collect natural water. With the water you collect, you will build a water filtration system to turn dirty or salty water into clean water. Be sure not to drink the water though! There is some information and tips to help you included in the attached file named "**Défi de STEAM semaine 6**". I have included the English version of the document as well with the name "**STEAM challenge week 6**". Be sure to use the third page for grades 6-8. I'd love to see your water filtration systems and some pictures to compare the water before and after being filtered, so feel free to share on Teams with the class!

Thursday

- **Netmath questions:** Continue with wherever you left off. If you happened to have completed all the activities/lessons that I've given you so far, then you can explore the website and find a new topic that interests you to try. Click on "Livres" on the left-hand side of the screen to find all the different math topics.

Friday

- **Fraction/decimal/percent art activity:** Using the 100 squares grid that is attached by the file name "**Grille de 100**", I would like you to create a pattern by colouring in squares on the grid. I would like you to use at least 4 different colours in your pattern. Be sure to colour in squares completely when designing

your pattern. Try to colour in most of or all the squares on the grid. After you are finished your pattern, I want you to consider the fraction value of each colour on your grid. Remember each square on the grid represents $1/100 \rightarrow 0,01 \rightarrow 1\%$.

Then with your fractions, convert them to decimals, and then percents. For example, maybe the colour blue covers 24 squares on the grid. This means that the colour blue has a value of $24/100 \rightarrow 0,24 \rightarrow 24\%$. Repeat this process for each colour that you have included in your drawing. Don't forget to include squares you might have left white. Once you are finished, you can share your pattern (and math work) on Teams if you want!

Extras

- **Research question of the week:** How do heavy flying devices, like large commercial airplanes, lift off the ground and fly? You can share your answers with the class on Teams!
- **Math problem of the week:** Each week I will give you a challenging math problem to try created by the University of Waterloo, good luck!
<https://cemc.uwaterloo.ca/resources/potw/2019-20/French/POTWA-19-NN-17-P-f.pdf>
Here is the solution to last week's problem:
<https://cemc.uwaterloo.ca/resources/potw/2019-20/English/POTWB-19-NN-01-S.pdf>
- **Percent games:** If you didn't have a chance yet, you can check out the website links to games that I posted on my teacher page last week.
- **Brainpop:** You can check out a video that talks about the coronavirus and test your knowledge with the quiz! "**Nouveau & Tendance**" \rightarrow "**Coronavirus**".



Happy Home Learning!



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