

Home Learning Activities: Week 8

Grade 6J – Mr. Methot



**Similarly to last week, here are a variety of home learning opportunities for the week. Pick and choose which activities you'd like to do. I encourage you to engage in at least one math, science, or STEAM activity each day. I would suggest trying a mix of computer activities and hands-on learning activities. Happy learning!

This week we will be exploring understanding angles, identifying the types of angles, estimating angle measurements, and measuring angles using a protractor. Before you get started, check out the file titled "Les Angles**" and the videos below about angles that help explain some important concepts.

<https://www.youtube.com/watch?v=ogo-jCiBw3g> - Les types d'angles

https://www.youtube.com/watch?v=4ErcvECGWFQ&list=PLrt_BPqnOBnOcdSUQms-ry54RGqBv6072&index=3 - Estimer la mesure des angles

Math:

- **Netmath** - I added 3 new lessons for you to try. Log in at www.netmath.ca. Here is the order I would suggest working on the new lessons in:
 1. Comparer des angles 1
 2. Estimer et mesurer des angles
 3. Construire des angles de mesure donnée 1
- **Dreambox** - There are 2 lessons assigned, and they are marked with a blue star. These lessons practice estimating the measure of angles and measuring angles using a protractor. Log in information can be found on my teacher page in a post I made last week.

- **Breakout EDU** - I have added a second game that you can solve. This one focuses on angles and measuring them using a protractor. It is called "**Case of the Missing Jewels**". Log in at <https://student.breakoutedu.com/login>. Good luck!

Class code: P3KS95

- **Rock, Paper, Scissors** - Check week 6 on my teacher page for more information.
- **Problem of the Week** - This week's problem gives you a chance to work on your comprehension of important vocabulary related to shapes and angles. You must identify the correct shape being described in each riddle:
<https://cemc.uwaterloo.ca/resources/potw/2019-20/French/POTWA-19-GS-11-P-f.pdf>

Solution to last week's problem:

<https://cemc.uwaterloo.ca/resources/potw/2019-20/English/POTWB-19-NN-26-S.pdf>

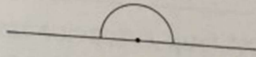
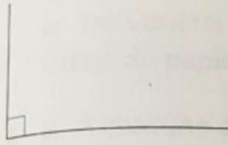
- **Scavenger Hunt** - A fun activity to get outside and search for math objects! Check out the file titled "**Chasse au Trésor de Maths**". Since we are looking at the different types of angles this week, you can also explore around the house for several examples of each type of angle that you can find. For example, a computer screen has a right angle (90°). You can take pictures of the items if you want and try to estimate the measure of each angle you find. Have fun with it and you will discover that angles are everywhere around you!
- **Online Angles Games** - The first game is great for practicing using an interactive protractor to measure angles. The second game is a fun challenge to try and create angles using estimation and visualizing the sizes.
https://www.mathplayground.com/rocket_angles.html

<https://www.mathplayground.com/alienangles.html>

- **Kakuro & Sudoku Puzzles**
- **Textbook Questions** - pg. 127-129 #1,2,3,5,7
The answers are included below.

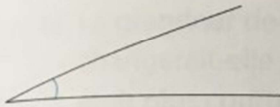
Découvre

Il y a des **angles droits** et des **angles plats** partout autour de nous.

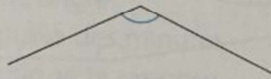


Le nom de chaque angle varie selon sa relation avec un angle droit ou un angle plat.

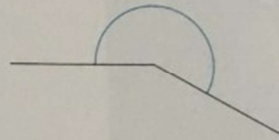
Un **angle aigu**
est plus petit
qu'un angle droit.



Un **angle obtus**
est plus grand
qu'un angle droit,
mais moins grand
qu'un angle plat.



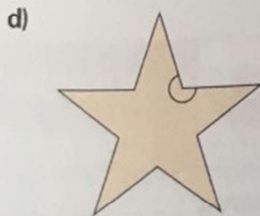
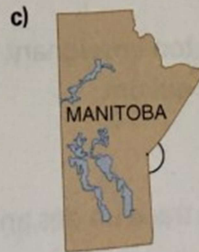
Un **angle rentrant**
est plus grand
qu'un angle plat.



À ton tour

Utilise une feuille de papier avec un coin carré au besoin.

1. Quel angle est un angle aigu ? un angle droit ? un angle obtus ?
un angle plat ? un angle rentrant ?

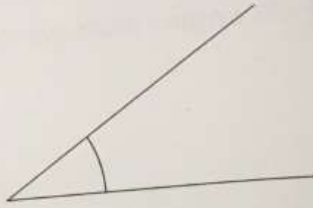


2. Indique si chaque angle est un angle droit, un angle aigu, un angle obtus, un angle plat ou un angle rentrant. Comment l'as-tu déterminé?

a)



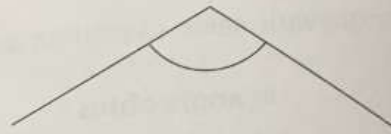
b)



c)



d)



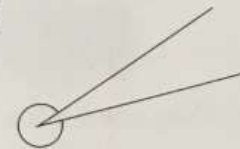
e)



f)



g)



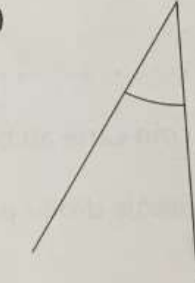
h)



i)



j)



3. Ton enseignante ou ton enseignant te fournira une copie de ces drapeaux. Trouve les drapeaux qui ont :

a) un angle droit;

b) un angle obtus;

c) un angle aigu;

d) un angle rentrant.

Sur chaque drapeau, trace un des angles de chaque type que tu as trouvé.



Colombie-Britannique



Saskatchewan



Nunavut

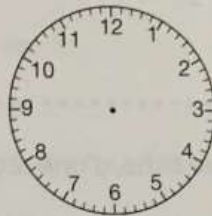


Canada

4. Trace un segment de droite sur du papier quadrillé. Imagine que le segment tourne autour d'une de ses extrémités. Quel type d'angle est formé par chaque rotation?
- Un demi-tour
 - Un quart de tour dans le sens des aiguilles d'une montre
 - Trois quarts de tour dans le sens inverse des aiguilles d'une montre
- Utilise du papier calque pour le vérifier.

5. a) À chacune des heures suivantes, quel type d'angle est formé par l'aiguille des heures et l'aiguille des secondes d'une horloge? Comment l'as-tu trouvé?

- 2 h 15
- 15 h 35
- 9 h
- 12 h 30
- 1 h 45



- b) La grandeur de chaque angle changerait-elle si l'aiguille des minutes était plus courte? Explique ta réponse.

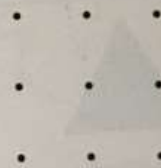


Horloge à vapeur, Gastown, Vancouver



6. Trouve 5 angles dans ta classe. Essaie de trouver un exemple d'angle droit, d'angle aigu, d'angle obtus, d'angle plat et d'angle rentrant. Trace chaque angle. Indique par écrit l'endroit où tu as trouvé chaque angle, puis le nom de l'angle. Comment as-tu déterminé le nom de chaque angle? Quel angle a été le plus facile à trouver? Explique ta réponse.

7. Utilise du papier à points quadrillé. Combien d'angles différents peux-tu tracer sur une grille de 3 sur 3? Classifie les angles. Montre ton travail.



Réfléchis

Quand tu vois un angle, comment sais-tu de quel type d'angle il s'agit? De combien de façons peux-tu le déterminer? Explique ta réponse à l'aide de mots et de dessins.

Science:

- **Research Question of the Week** - We will continue looking at flight, the forces of flight, and flying organisms such as birds and insects. **What is Bernoulli's principle? How does this principle impact the flight of insects, birds, or even large airplanes?**
- **Exploring Bernoulli's Principle** - Here are some hands-on activities and situations that involve this principle. It explains why certain objects move the way they do. Very interesting and fascinating!
 1. Suspend two ping pong balls from a meter stick across two chairs at the same level, about 6-10 cm apart, and predict how the balls will move when you blow between them. Test your prediction to see what happens.
 2. With the fingers of both hands, hold a single sheet of paper just below your lower lip. Allow the paper to bend and hang downward, then blow across the top surface of the paper. What happens?
 3. Some real-life examples of Bernoulli's principle include the movement of a shower curtain after the shower is turned on, the way long hair will fly out an open window of a moving car, and throwing a baseball curveball. If you are curious to learn more, you can research these situations to learn more about why they occur and how they are affected by Bernoulli's principle.
- **Insect Investigation** - Explore outdoors for insects and see if you can catch a close view of their wing design and shape. You can try to take a picture to zoom in further on the details of the wings. If you want, you can also draw an insect that you believe has wings that are best designed for flying based on their shape. You can share pictures of your discoveries and findings on Teams! 😊

STEAM:

- **Week 8 Challenge** - Check out the attached files. Feel free to try any of the other cross-curricular activities. Have fun and share on Teams if you want!

Videos:

- **How to Use a Protractor to Measure an Angle** - https://www.mathplayground.com/mv_using_protractor.html
- **What are Angles?** - <https://www.youtube.com/watch?v=ogo-jCiBw3g>
- **Estimating Angles** - https://www.youtube.com/watch?v=4ErcvECGWFQ&list=PLrt_BPqnOBnOcdS_UQms-ry54RGqBv6072&index=3
- **Bernoulli's Principle** - <https://www.youtube.com/watch?v=mgeIWXld9FU>

Textbook Answers

pg. 127: #1

1. a) angle **droit** (90°)
b) angle **aigu** (moins que 90°)
c) angle **obtus** (entre 90° et 180°)
d) angle **rentrant** (entre 180° et 360°)
e) angle **plat** (180°)

pg. 128: #2,3

2. a) angle aigu
b) angle aigu
c) angle plat
d) angle obtus
e) angle rentrant
f) angle obtus
g) angle rentrant
h) angle obtus
i) angle droit
j) angle aigu
3. a) angle droit → tous les drapeaux (les coins)
b) angle obtus → Saskatchewan, Nunavut, Canada
c) angle aigu → tous les drapeaux
d) angle rentrant → tous les drapeaux

pg. 128: #5,7

5. a) i) angle aigu/reentrant
ii) angle obtus/reentrant
iii) angle droit/reentrant
iv) angle plat
v) angle obtus/reentrant
- b) Non. La longueur des rayons ne change pas la mesure/grandeur d'un angle.

7. C'est possible de tracer chacun des 5 types d'angles sur une grille de 3 sur 3 qui a des points quadrillé.



Good Luck with the Virtual Olympics that begin Today!

<https://twitter.com/gerritbosma9>