

Lesson Plan

Subject: Math	Name: Katie Wilson
Grade: Three Lesson: 2/3	Date: Nov. 20-Nov.23
Topic: Bees and Board Games	Length of Period: 90 minute period

Learning Objectives:

- 1) Students will persevere through the games even if the likelihood of them winning is low
- 2) Students will make connections with patterns in games and the "Bee Movie"- hopefully sparking the notion that there are patterns all around us and they do not only exist in the number world
- 3) Students will think critically about the world around them, noticing patterns and relationships between everyday items or activities

Curriculum Objectives:

- A. Social-Emotional Learning (SEL) Skills in Mathematics and the Mathematical Processes
- C. Algebra

Specific Curriculum Expectations:

- A3. Maintain positive motivation and perseverance-** recognize that testing out different approaches to problems and learning from mistakes is an important part of the learning process, and is aided by a sense of optimism and hope
- A6. Think critically and creatively-** make connections between math and everyday contexts to help them make informed judgements and decisions
- C1. Patterns and Relationships-** identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts

What am I doing?

- 1) I am showing the last half of the "Bee Movie" and students will mark down when:
keeping a running tally going
 - Someone says "bee"
 - Someone says "honey"
 - Someone gets stung

Time allotted: 35 minutes

- There is a breaking news blurb

This will allow students to gain a sense of pattern in a non-numerical form, first.

2) Students will get into groups of 4 to play board games→ they will mark down their wins and losses in their notebooks

- Marking down their own data and **later** forming it into a graph of their choice, will help students grasp the idea of patterns and relationships while keeping it personal enough to make them think critically, and make honest predictions. Their human desire to win will be a motivation or source of perseverance for students to participate in the games.

Games that will be played:

- Bingo (I will create)
- Sorry! (board game)
- Skunk Bingo (board game)
- Twister (game)

Time allotted: 40 minutes

3) Students will have free choice of what media they choose to create their graphs with- some may choose digital, some may choose drawn, etc.

What will I need?

Games that will be played:

- Bingo (I will create)
- Sorry! (board game)
- Skunk Bingo (board game)
- Twister (game)

- The "Bee Movie"

Assessment Strategies

- Students will be assessed on their ability to complete worksheets, create patterns with everyday objects, and relate nature to mathematical patterns

- The artifacts they create in class will be a testament to their knowledge and understanding→ and that is what will be evaluated

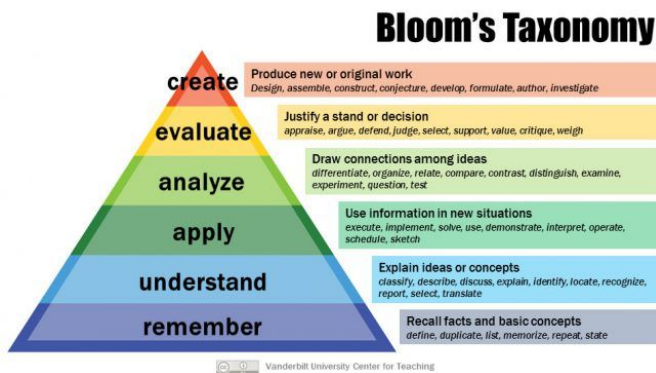
Introduction to the Lesson

Hook, Line and Sinker: I will play the rest of the "Bee Movie" (we watched the first half at the end of the day on Friday) → I will ask students to mark down on their "Bee Movie" tally whenever the following happens:

- Someone says "bee"
- Someone says "honey"
- Someone gets stung
- There is a breaking news blurb
- You feel sad about the bees

What should they know before we start the lesson? That today is not about winning or losing, it is about finding the patterns and making connections and relationships with possibilities and data

Activities Based on Bloom's Taxonomy



Remember→ what you already know about graphs, patterns and relationships

Understand→ explain in the reflection section why your data is what it is, and why you chose the graph type you did

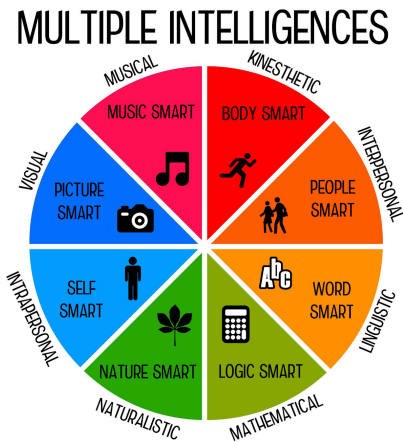
Apply→ use your prior knowledge, movie knowledge, game data knowledge to showcase it using a graph→ you can choose whichever media you'd like to portray your data

Analyze→ in your reflections you will be thinking about why your data is what it is, why you chose the graph style you did, what the relationship to your game data and your bee movie data is if there is one

Evaluate→ your graph and reflection will be a justification to why your data is what it is and why you chose to portray it how you did

Create→ a graph that has your original game data in it

Activities Based on Gardner's Multiple Intelligences



Musical→ there will be music in the bee movie→ this lesson is not geared towards this intelligence

Bodily Kinesthetic→ students may go for a walk whenever, as long as their work is done on time. When they present their graphs they can be as physical as they'd like!

Intrapersonal→ the data collecting will be done individually as well as the graph making

Linguistic→ students will will writing out their data, and playing games in which reading will be required

Logical/ Mathematical→ this is a math lesson on data collecting, and noticing patterns and relationships within the number world as well as the linguistic world

Naturalistic→ students may use natural images to decorate their charts (ex. Using leaves as a border, or using an image of a bee, etc)

Interpersonal→ this is a highly social lesson, as students will be playing games and collaborating together

Visual/Spatial→ students will view the last half of the "Bee Movie", play games with each other, and design their graphs with whichever media they so desire

Reflection Activity/ Discussion

Start work on the graph- and reflect individually on your data and how you will portray it in a graph **Time allotted: 15 minutes**

Written Questions→ These will go with their graphs, and movie data:

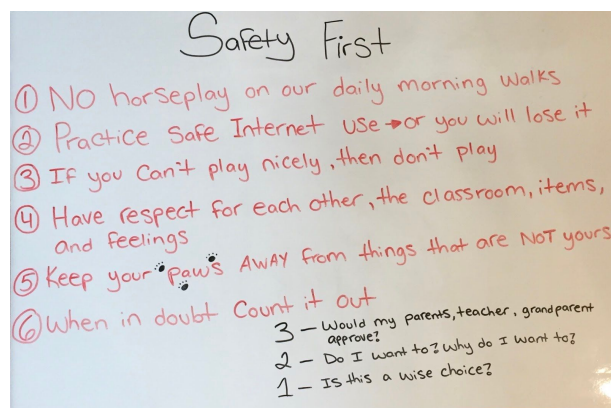
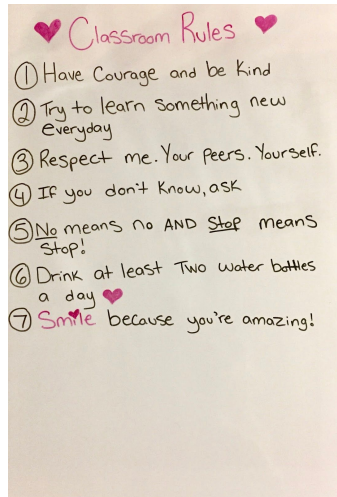
1) What do you know about bees? Use a KWL chart to organize

- 2) Why did you choose the graph you did?
- 3) Which character in the "Bee Movie" is the most like you? Why?
- 4) Tell me about the patterns in your data. What do you notice? Did anything surprise you?

Classroom Safety Considerations

- * Refer to the flip chart we wrote together, on the board for our Classroom Rules
- * Refer to the flip chart we wrote together, on the board for our classroom Safety First

- A copy of the flip chart and Safety First chart has been added below



Follow Up Discussion

We will use the "Coffee House" section of the classroom and have the students in groups... Similar to a work meeting over coffee. Students will present their ideas to the group, rather than the whole class. The students will give feedback to each other → I will be watching and listening to the presentations. The students will submit their graphs after this activity.