Scratch Number Lesson TBD Grade 1/CTF 60 minutes

ABSTRACT

Through the use of Scratch, students will be generating numbers and drawing them out on a worksheet. Students will be working through 2-3 worksheets (0-9 numbers, 10-99 numbers, and 100-999) at their own pace.

CURRICULAR OUTCOMES

Math

OI: Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.

GQ: How can quantity be communicated?

LO: Students interpret and explain quantity to 100.

KUSP: Count within 100, forward by 1s, starting at any number, according to the counting principles.

Tech

GO: C1: Students will access, use and communicate information from a variety of technologies **SO:** 1.1: Access and retrieve appropriate information from electronic sources for a specific inquiry

I Can...

I can count forward by 1s, starting at any number, up to 100.

I can find and use information from electronic sources to answer questions or learn about a topic.

REAL WORLD RELEVANCE

Using Numbers in Daily Life: Numbers are used everyday for various things. Learning them early makes the rest of life easier. Knowing numbers helps with things like counting money, reading clocks, and keeping track of things (e.g., toys, snacks, or favorite activities).

Technology Skills: Using the website to complete their worksheets teaches them how to gather and use information online, which is a skill they'll use for schoolwork and projects in the future.

Problem-Solving and Creativity: Drawing numbers in different ways encourages creativity and can be linked to real-life situations where they'll need to think creatively (e.g., designing posters or creating art).

Collaboration and Independence: Encourage students to help each other when using the website, fostering teamwork, and also learning how to independently follow instructions—skills that will be valuable as they grow.

DIFFERENTIATION

B: (Discuss this with MT and EA) - He might be able to generate the number and say it outloud. If he can write the number that would be great, otherwise just him saying it outloud should be enough.

S: (Discuss this with MT and EA) - She does not like laptops/iPads, so this may be tricky to do with her, but if the EA says a number and she can write it that should be enough.

ELL: Constant check ins and thoroughly explaining/re-explaining assignment

Visual learners: Benefit from the hundreds chart in the slideshow and examples on the board. **Kinesthetic learners**: Incorporate movement (exercises for every 20 numbers) to reinforce number sequencing.

Auditory learners: Counting aloud as a class or in pairs during the hundreds chart review will support auditory processing.

Struggling students: Provide a reduced range of numbers or additional time. Offer guided practice by working through extra examples as a group. Support with smaller sets of numbers (0-9, 10-99). Provide one-on-one or small-group support.

Advanced students: Extend the activity by allowing them to generate more complex numbers (e.g., 3-digit numbers) for their drawings, or challenge them with additional criteria (like grouping numbers in tens, creating patterns, etc.).

RESOURCES/MATERIALS

- Chromebooks/laptops 1 per student
- Slideshow
- Randomizer Grade 1
- Randomizer Worksheet

Learning Tasks			
Intro/Hook			
Time	Learning activities	Diagnostic Assessment	
15 mins	 We will start with reviewing numbers. Using the hundreds chart in the slideshow - go through it counting the numbers. To get students moving, have them do different exercises for every 20 numbers. Next using the <u>randomizer</u> students will be completing Randomizer Worksheet. Go through a few examples on the board by pulling up and generating a number. Do that number by yourself as an example, then do it again having students come up and draw out that number. 	Going through the numbers as a group gives a good sense on who has their numbers memorized and those who are still memorizing. Working through examples as well gives an understanding to those who understand the assignment.	



	<u> </u>		
	 Explain students can draw anything as long as they can fit that number in the box. If they do not feel like drawing anything complicated, then simple shapes are good (and recommended, but it is whatever the student is comfortable drawing). Explain that if a student gets the same number twice then to press the generate button again to get a different number. 		
Develo	oment		
Time	Learning Activities	Formative Assessment	
40 mins	 Start by handing out the 0-9 worksheet. Have students log on and open up the website, helping anyone who needs it (if there is a lot needing help, ask those who are already logged on to help the others). Let them go through the website completing the worksheet at their own pace, constantly checking in for all students. Once a student is done with the first worksheet, hand them the 10-99 one. Students should take longer on this one as there is more to draw, but those who finish early have the choice to complete the 100-999 as a challenge, or simply explore more Scratch games - without distracting peers. 	Checking in with students	
Closure			
Time	Learning Activities	Assessment	
5 mins	 Ask students to finish up the number they are on and hand in the worksheets. Have students close all tabs and log off, helping those who need it (if there is a lot needing help, ask those who are already logged on to help the others). Plug the laptops in yourself. 	The completed worksheets are a good summative assessment to get an understanding who has gotten their numbers.	
Teaching Reflections			
TBD			