Medium Level Scratch Lesson Plan
"Question and Answer"
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GOALS
1. Learn more about Scratch animation programming
2. Learn Scratch Skills that will lead into the Pong game lesson

BIG IDEAS
Learn how to take some scratch skills and use their own ideas and inventiveness to create an interactive scratch environment.

SKILLS TO LEARN
- How to use the Question and Answer commands in Scratch
- How to make the Sprite move with the mouse
- How to make the Sprite stay on one level of the Y Axis while moving with the mouse
- How to use the Turn command and how that relates to a compass and angles

If time and experience level allows:
- Introduce broadcast (when I receive)
- Sensing – touching
- Counter

MATERIALS
- All computers installed with Scratch
- Question and Answer Activity Idea Sheets for each participant
- Very basic example of Question and Answer
  - no art detail to allow their creativity to come from unique place
- Your own working examples of the lesson to reference if needed, don't show this at the beginning of the lesson, but help them develop their own ideas.

ACTIVITY PLAN

WARM UP ACTIVITY:

Compass/Angle Game Ideas
1. **A matching game where half of the participants have a picture of an angle and the other half have the angle name (90 degrees, 180 degrees, etc.) and they have to find each other.**

2. **Get compasses and send participants on a little adventure/path where they need to end up at a certain place using the directions given for the compass**

   ### THE ACTIVITY
   - Break up your class room into small groups so that each teacher has a similar number of students
   - Have each teacher introduce Question and Answer skills, a little at the beginning and more as they go along, sneak in the explanations as they develop their scratch environment and when they ask questions or need help moving forward

- Reference Skills to learn section above to know what to include.
- Reference the Questions and Answers Activity Ideas Brochure as they proceed with their creation.
- Encourage participants to provide explanations for each other

Activity Flow

1. **Draw a Character/Sprite**

2. **Write down on paper some questions you would like your Sprite to ask.**

3. **Have your sprite ask those questions.**

4. **Have the answers show or be used to make something else happen.**

5. **Have your Sprite move wherever the mouse moves.**

6. **Now limit your Sprites movement to sideways across the screen.**

   No up and down movement.

7. **Have a sprite turn a certain amount of degrees at some point(s) in the program.**

Additional Challenges if time and experience allows

- **Send a broadcast message and make something cool happen**

- **Add a Counter**

- **Use touch to make something happen**

CIRCLE UP:

Have each group share their creations and talk about what they learned