1. Twinkle Twinkle

Activity Structure – 45min

Activity	Timing
Warm up Game	5 mins
Introduce Story and Project	10 mins
Main Activity	25 mins
Final test & debug	throughout
Share with group	5 mins

Overview

The Song – "Twinkle, twinkle little star"

Children will create a project with a twinkling star using the Hide and Show blocks. They will record the song "Twinkle, Twinkle" with an awareness of an audience.

Learning Objectives

• To use looks blocks, hide and show
• To record a sound independently.

National Curriculum / EYFS Curriculum Links

Expressive arts and design
• Begins to build a repertoire of songs and dances.

Warm up game

Lucky bag
• Bring a lucky bag or box to class. Put all the flashcard blocks learnt so far in there as well as a couple of new ones. Challenge the children to pick a card at random and guess what it does. So that none of the children feel put on the spot explain that they can ask a friend or adult to help them out if they're not sure and praise them for having a guess even if they don't know.

Introduction (discuss the project together, share ideas and create excitement)

• As a group, sing the song "Twinkle, twinkle little star, How I wonder what you are! Up above the world so high, Like a diamond in the sky. Twinkle, twinkle little star, How I wonder what you are!" Encourage the children to do the actions of opening and closing their hands.

• Show the children the project. *What trigger block do you think will start this project?* Watch the project and then ask the children to predict which Scratchjr blocks have been used to create the twinkling effect. (Explain "Predict" means a good guess and praise the children for all their attempts.)

• *Why is the repeat forever block important? What would happen if we didn't tell the star to repeat the action of Hide and Show?* From the Flash Cards can the children identify the repeat and repeat forever blocks.

• Let's look at the code. Show the first stars code to check the children's predictions and correct any misconceptions. *Why is the recorded sound not in the same line of code as the Hide and Show?* (Because we want the star to "twinkle" at the same time as the song is being played. If they were in the same line of code the actions would happen one after the other "**Sequentially"**) You could demonstrate this [Start on green flag Hide, Show, Recorded Sound, Repeat forever]

• Look at the second star's code, *What block is used to make the star start flashing later than the first star? Why is a repeat block used here instead of a repeat forever?* Demonstrate how to use the repeat block for new coders.

Project Plan

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Main Activity Key questions and teaching

1. Select a space background. Use the draw function to edit the colours. Set a time limit for this.

2. Select two or three stars. Use the draw function to change the colours. Resize the stars using the "Grow" block.

3. Position your characters.

4. *Record "Twinkle, Twinkle Little Star"* [Start on Green flag, Play Recorded Sound]

5. Let's make the stars twinkle. The first star will Start on [Green Flag , Hide, Show, Repeat Forever] The second star will start to twinkle after a wait. *Why do you need to use a repeat block rather than a repeat forever? How many times will you repeat Hide and Show? Will you use a wait block between Hide and Show?*

6. Let the children tinker with the wait and repeat blocks.

7. Add a rocket or a spaceman. Will you add your photo to the character? New coders will need support to do this. [Start on Green Flag, MOTION BLOCKS of choice, Repeat forever]

8. Test and debug. Have you recorded your song clearly? Do all the stars twinkle when you would like them to? Does your spaceman/ rocket character move about the screen in an interesting way?

Teaching points

- Consider the audience when recording the "Twinkle, Twinkle" Song. *Is the recording clear? How long is your song?*
- Encourage the children to test and debug throughout.

Possible Extensions

- Create your own characters in the Scratchjr Paint Editor.
- Can the children use a variety of motion, control and looks blocks to create more complicated effects for their stars.
- Use wait, hide & show blocks to create a shooting star effect.

To Simplify

- For the Rocket's movement, choose a limited number of motion blocks for the children to use and have these in front of them on the flashcards, including green flag and repeat forever block. *Can the children do this independently?*
- Support the children to record the song.
- Have one twinkling star. [Start on Green Flag, Recorded Song, Repeat Forever] [Start on Green Flag, Hide, Show] Demonstrate why you need 2 Green Flags (Because you want the two actions to happen at the same time rather than one after the other)

Finishing up

- Children share their projects with the class.
- Run through the flash cards of the coding blocks the children have used today. Hold each one up and ask the group to say what it does, encourage them to do the action too.
- If they are unsure of any encourage and praise them for having a guess even if it's wrong.

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