Unit 2, Lesson 5: Habitats and Scratch!

Lesson Intro:

Theme of the Day
Explain to students that now that their basic research on their animal is done, they can start helping their animals. Today students will be using their research to start building their animal a home using the Scratch program.

Learning objectives	Concepts (Social & Cross Curriculum)
● Create a livable habitat for your animal/Sprite based on your research ● Choose custom backgrounds and Sprites ● Insert multiple Sprites	● Research ● Procedure

Vocabulary	Guiding Questions
● Habitat ● Sprite ● Background ● Remix ● Setting ● Resources ● Upload ● Survival	● How can I make my research come alive in Scratch? ● How do my Sprites and background show what I know about my animal? ● What else will my animal need to survive in their habitat?

Resources
● Computers ● Scratch Program ● Space Bucks ● Habitat Remix Sheet ● Habitat Model Sheet if needed

Lesson Procedure:

Explore (10 min)
Don't Forget: Have computers available for Scratch and if possible have the website up and ready to save time.
Mini-lesson: For today's exploration, students will have a little bit of time to play around on their own on Scratch. Students may start and save a new project or continue to work on the project that they were working on yesterday. It should be saved when they sign in as "Explore". Have students sign on to their Scratch accounts and create a new project. Quickly remind students about some of the blocks that they have learned about to give them a jump start on their exploration. Allow time at the end to quickly share out some great discoveries! Give out Space Bucks for students who are being creative and independent.

Teacher Guided Learning (10min)
Don't Forget: Habitat Remix Sheet
Mini-lesson: Introduce the theme of the day. Explain to students that now that they have done their research, it is time to start building their animal's habitat. Review some of the main themes from the teacher guided video. Specifically, remind students that they will be adding their animal Sprites to the Scratch program. They will also be adding backgrounds similar to the ones that their animal Sprites might live in. Remind students to follow the directions exactly as they are written on the Habitat Remix Sheet. One important step during the "remix" in Scratch is that students will need to delete all other Sprites except their main Sprite/animal. There will be many Sprites that appear at first. Just assure students that once they delete all other Sprites, they are ready to create their animal. Also, remind students that they must also delete all additional backgrounds except for the one that's for their animal from the "remix." For teachers who want to reinforce this procedure, you can use the Habitat Remix sheet to model how to remix the animals and backgrounds into their accounts.

Give out Space Bucks for students that are on task.

Partner/Team Practice (25 min)
Don't Forget: Habitat Remix Sheet, have each student's Habitat Model I sheet available for them to reference if needed.
Mini-lesson: Explain to students that now that they have a basic understanding of their animal and what their animal's habitat should look like, their goal will be to start generating their habitat and animal in Scratch! Explain to students that they should first follow the Habitat Remix sheet to load all of the animal Sprites and habitat backgrounds into Scratch. Students will continue to follow the steps on the Habitat Remix sheet to select their animal and the appropriate background/habitat. Once students have added their animal Sprite and chosen a habitat background they should add 2-4 more Sprites to their scene. Remind students that one Sprite should be their animal, one sprite should be something their animals eats and the rest should be things the animal can engage with based on their research. Give the example of adding the monkey sprite and also adding a banana sprite, a tree sprite etc. If students are struggling to find a Sprite they want, have them use their creativity and research to find suitable food/living items for their habitat. Once students have an appropriate background and 2-4 additional Sprites in their scene they should start using the blocks they learned from yesterday's lesson to make their Sprites move. Encourage students to try to make each Sprite move. Note that this has not been taught yet. You should encourage a sense of exploration and have students try new things and share successes and failures with each other. If a student's work gets too hard for the teacher to fix have them start a new project and title it Animal Habitat 2 and so forth. Make sure students save and share their work and title it, "Animal Habitat." Give out Space Bucks for independence, creativity, being on task and doing their best.

Reflect/Connect (5 min)
Don't Forget: NA

Mini-lesson:
For today's reflection students will share their habitats. They should show their habitats on Scratch. Students can give feedback on what else they might want to include.

Students can also share what they are struggling with either in Scratch or in thinking about building their habitats.

Give out Space Bucks for students that are being creative by sharing ideas with others and students who are on task.

Models:

Habitat Remix Sheet

HABITAT REMIX

1 Type Habitat Remix 2.5 in the Scratch Search bar.

🔍 HABITAT REMIX 2.5

2 Click on Habitat Remix 2.5

Habitat Remix 2.5
Reimagined227

3 Click the Remix button in the top right corner

⊚ Remix

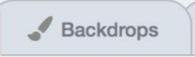**4** Find the blue box and choose the animal you will use

5 Remove all of the animals you do not want by clicking on the Garbage Can

Elephant

6 Click on the Stage button on the right, beside the sprites

Stage

Backdrops
14

7 Click on the Backdrops tab on the top left of the screen

🖌 Backdrops

8 Choose the habitat your animal will live in. Delete the rest of the backgrounds by clicking on the Garbage Can

4

Jungle
480 x 360

9 You are now ready to code if you have 1 sprite and 1 background

</> CODEINCLASS