

1. Title: What's in the Box?

Summary: When the green flag is clicked, a box appears on the stage. When the box is clicked, the sprite switches to a random costume. This makes it appear as if the item was in the box. There are currently 6 costumes.

Link for Teacher: <https://scratch.mit.edu/projects/118934637/#editor>

Link for Students: <https://scratch.mit.edu/projects/119775892/>

Lesson: [Click here](#) p. 3.

What's in the box?



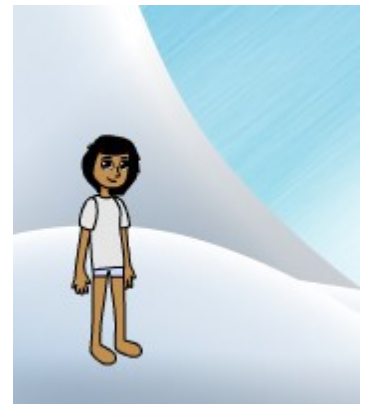
2. Title: It's Cold Out Here!

Summary: When the green flag is clicked, a sprite is on a snow background. The sprite says, "Burr it is cold!" When the sprite is clicked it moves across the stage to a coat and pants. Then the sprite says, "Now I am nice and warm." The students record their voices to make the sprite talk.

Teacher Link: <https://scratch.mit.edu/projects/118744658/#editor>

Student Link: <https://scratch.mit.edu/projects/119839171/#editor>

Lesson: [Click here](#) p. 5



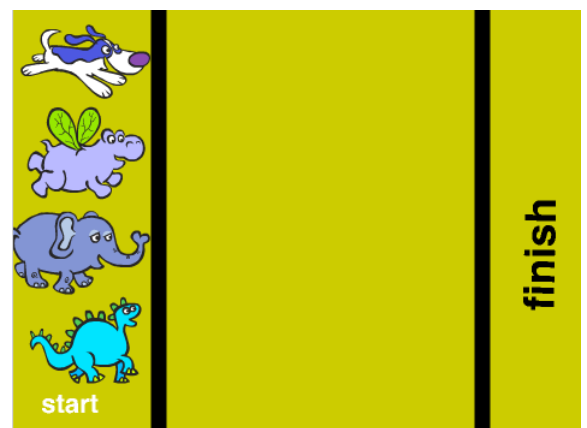
3. Title: Off to the Races

Summary: Students decide how quickly each animal will arrive at the finish line by inputting a number from 1 to 10, into a glide to block. They can change the winner by changing the input number.

Link for Teacher: <https://scratch.mit.edu/projects/119974448/#editor>

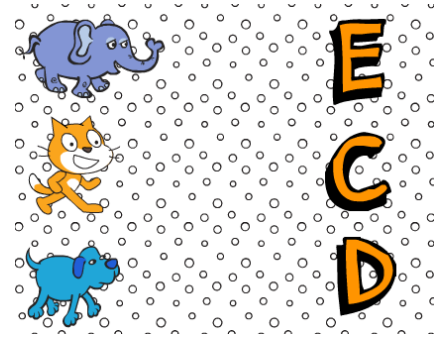
Link for Students: <https://scratch.mit.edu/projects/119975098/#editor>

Lesson: [Click here](#) p. 7



4. Title: Beginning Sounds

Summary: Students decide which game they want to play. Then they link blocks and click on the sprites to make the animals move to the correct beginning letter. The letter changes color. The sprites change costumes and color.



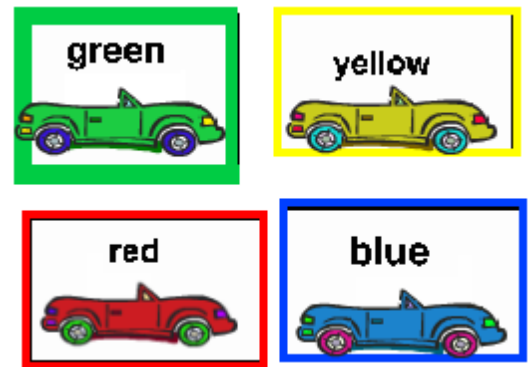
Link for Teacher: <https://scratch.mit.edu/projects/118697902/#editor>

Link for Students: <https://scratch.mit.edu/projects/119971256/#editor>

Lesson: [Click here](#) p. 9

5. Title: Color Words

Summary: Students use color words from a drop down menu to make the cars go to the correct color box.



Link for Teacher: <https://scratch.mit.edu/projects/118935812/#editor>

Link for Students: <https://scratch.mit.edu/projects/119963766/#editor>

Lesson: [Click here](#) p. 11

What's in the box?

Title: What's in the Box?

Summary: When the green flag is clicked, a box appears on the stage. When the box is clicked, the sprite switches to a random costume. This makes it appear as if the item was in the box.

There are currently 6 costumes.



Common Core:

- (SL.K.2) Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- (SL.K.5) Add drawings or other visual displays to descriptions as desired to provide additional detail.
- (RL.K.7) With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g. what moment in a story an illustration depicts.)

Programming Skills with Scratch:

- Use a mouse to move blocks, and click on items
- Link blocks
- Use “green flag” to start a script
- Use When this sprite clicked block
- Use pick a random number block from Operators Category
- Drop a block into another block
- Add a new costume and switch costumes
- Change a input number in operators block
- Debug or fix a script

Link for Teacher: <https://scratch.mit.edu/projects/118934637/#editor>

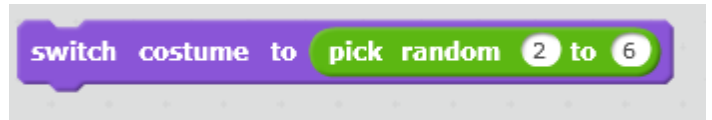
Link for Students: <https://scratch.mit.edu/projects/119775892/>

Unplugged Activity:

1. Show the students a small box with a lid. Have a small item in the box. Ask students to guess what is in the box. Open the box to see if they were correct. Then repeat several times with a new item.
2. After several times, show the students the items you have available to put in the box. Then ask them if they think an item you do not have would appear in the box.

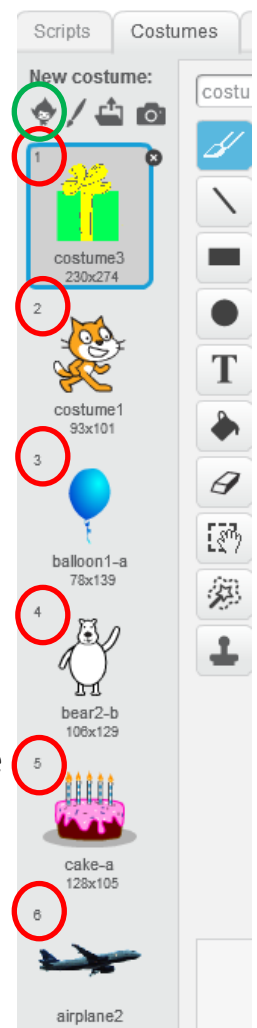
Activity:

1. Show students the completed project found at the **Link for Teacher** above.
2. Play the game several times.
3. Show all the costumes for the sprite by clicking the costume tab. This shows that there are six costumes. Count the number of costumes together. They include a box, a cat, a balloon, a bear, a cake, and a plane.
4. Ask if a cake will ever be in the box. Ask if a frog will ever appear in the box.
5. Show how to drop the operator block into the switch costume block. Notice the first number in the random block is 2, not 1. That is because the box is the first costume, and you want a different costume to appear when the box is clicked.
6. Show the students the **Link for Students**. Explain that the script is not working correctly. Tell them you will need their help in fixing the script.
7. Give time for students to “fix” the project and share with others.



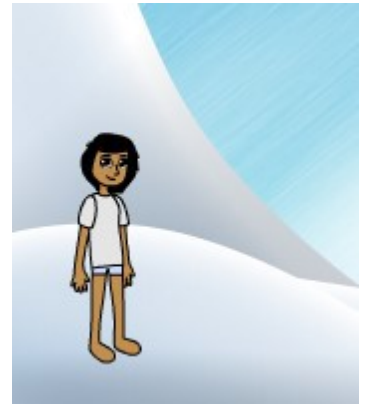
Extension:

1. Ask if students would like more choices to appear in their boxes.
2. Count the number of costumes together. Show them the costume numbers as you count. They are circled in red in this picture.
3. Show that the last number in the random block is 6, which is the same as the number of costumes.
4. Show how to add another costume. Click the new costume icon circled in green. A library of sprites opens. Double click on any sprite. The sprite will appear as a new costume in the list.
5. Increase the last number in the random block every time a new costume is added.
6. Give students time to select new costumes to appear in the box. Remind them to increase the random block each time they add a costume.



Title: It's Cold Out Here!

Summary: When the green flag is clicked, a sprite is on a snow background. The sprite says, "Burr it is cold!" When the sprite is clicked it moves across the stage to a coat and pants. Then the sprite says, "Now I am nice and warm." The students record their voices to make the spite talk.



Common Core:

- (SL.K.6) Speak audibly and express thoughts, feelings, and ideas clearly.
- (RL.K.7) With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g. what moment in a story an illustration depicts.)

Programming Skills with Scratch:

- Link blocks
- Students record their own voices
- Input data into blocks
- Slide a block into a repeat block

Teacher Link: <https://scratch.mit.edu/projects/118744658/#editor>

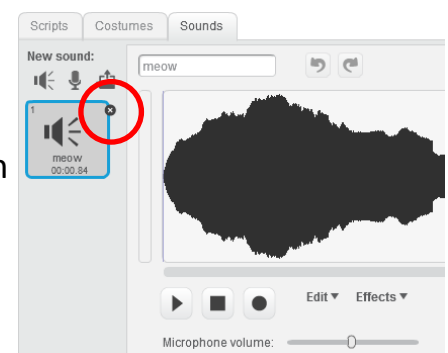
Student Link: <https://scratch.mit.edu/projects/119839171/#editor>

Unplugged Activities:

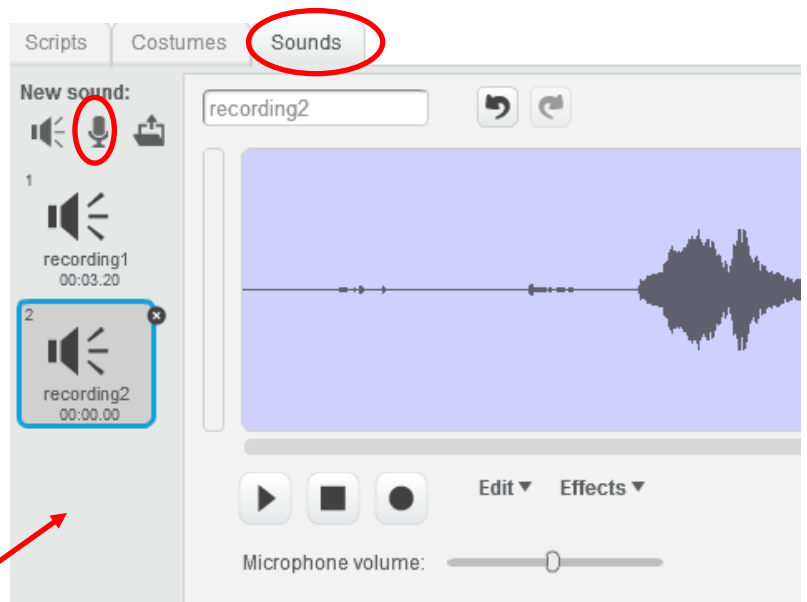
1. On a cold day, ask students what would happen if they went outside without their coats. What would they say? Record some of their answers.
2. Let students act out what they would do if they were outside without their coats. Let them pretend to put on their coats.

Activity:

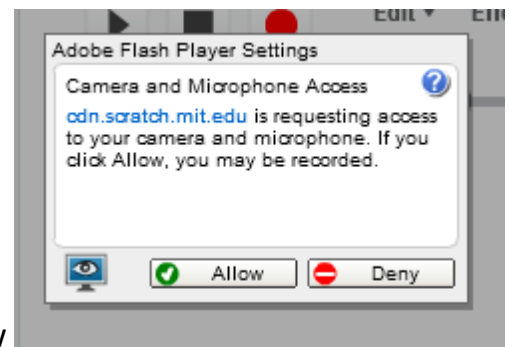
1. Show students the completed project found at the **Link for Teacher** above.
2. Play the project several times.
3. Pull apart the blocks and click the sound blocks.
4. Show students how to record their own voices. (When you open a new scratch project and click the sound tab, you see the "meow" sound the cat makes. Delete this sound by clicking on the x circled in red. This cat sound has already been deleted in the **Links for Teacher and Student.**)



5. Click the Sounds tab.
6. Click the microphone icon.
7. Begin recording by clicking the black circle shown circled in purple. Record your voice. Click the same circle to end the recording. A new recording will appear in the list at the red arrow.
8. Click the black triangle, circled in green, to hear your recording.



9. Note that when the black circle is first click, a request to allow access to the computer microphone may first appear. Click Allow.
10. Show student the **Link for Students** script. Tell them this script does not work. They will have to fix it. Show them how to drop the **move** block into the repeat block.



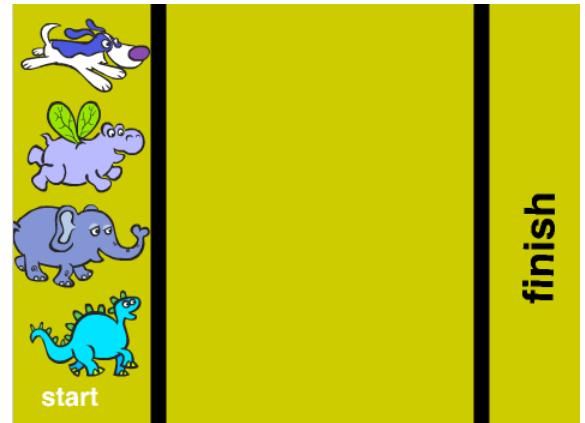
11. Ask students to notice the **move** block does not have a number in it. The sprite will not move without a number. Tell them they should try number from 1 to 10 until they find a number that makes the sprite stop behind the warm clothes.
12. Ask students to attach the sound blocks, and then test their scripts by clicking the green flag and clicking the sprite. They should keep trying to link their blocks in different ways and using different numbers until their scripts respond in the way they expect.
13. Give time for students to “fix” the project and share with others.

Extensions:

1. Let students change their recordings. Let students discover how to use the new recordings in their projects.
2. Give time for students to talk about and share their projects.

Title: Off to the Races

Summary: Students decide how quickly each animal will arrive at the finish line by inputting a number from 1 to 10, into a glide to block. They can change the winner by changing the input number.



Common Core:

- SL.K.2) Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- (K.CC.C.7) Compare two numbers between 1 and 10 presented as written numerals.
- (K.CC.B.4) Count to tell the number of objects. (C. Understand that each successive number name refers to a quantity that is one larger.)

Programming Skills with Scratch:

- Link blocks together
- Use **When space key pressed** block
- Input numbers into a block
- Debug or fix a script

Link for Teacher: <https://scratch.mit.edu/projects/119974448/#editor>

Link for Students: <https://scratch.mit.edu/projects/119975098/#editor>

Unplugged Activity:

Load a big stopwatch on the projector screen. Start the stopwatch several times. Stop it at random number from 1 to 10. Ask which times were quick. Which times were slow.

Activity:

1. Show students the completed project found at the **Link for Teacher** above.
2. Play the game several times.
3. Show students the scripts and show them how to change the input number in the glide to block. What numbers should you input to make the elephant win? What numbers should you input to make the elephant lose?

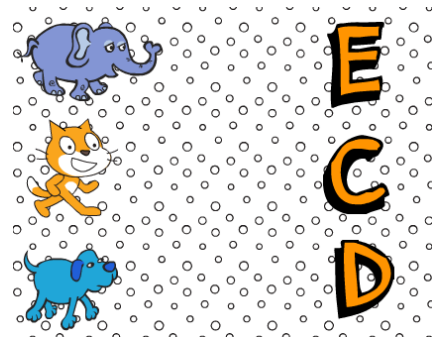
4. Show the students the **Link for Students**. Explain that the script is not working correctly. Tell them you will need their help in fixing the script. When the space bar is clicked the animals do not move. Why? (The blocks are not linked, and there are no numbers in the [glide to](#) blocks.)
5. Allow time for students to “fix” the scripts and share the project with others.

Extension:

1. Ask students to change their scripts so the animals finish the race in this order:
 - Dinosaur, hippo, elephant, and last dog.
 - Let them decide in which order the animals finish.
2. Ask student to change the race so all the animals tie.
 - Let students decide which animals tie.
3. Give students time to talk about and share their projects.

Title: Beginning Sounds

Summary: Students decide which game they want to play. Then they link blocks and click on the sprites to make the animals move to the correct beginning letter. The letter changes color. The sprites change costumes and color.



Common Core:

- (SL.K.2) Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- (RF.K.2) Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
- (RF.K.3) Know and apply grade-level phonics and word analysis skills in decoding words.

Programming Skills with Scratch:

- Respond to the [ask and wait](#) block
- Use “when this sprite clicked” block
- Link blocks together
- Select a new backdrop from a short list

Link for Teacher: <https://scratch.mit.edu/projects/118697902/#editor>

Link for Students: <https://scratch.mit.edu/projects/119971256/#editor>

Unplugged Activity:

1. Number two tables. Call one Table 1. Call the other Table 2.
2. Collect several objects that start with different letters. Put some of the objects on Table 1 and some of the objects on Table 2. There should also be a paper with the beginning letter for each object on the same table as the object. So if there is a ball on Table 1, also put a paper with the letter B on Table 1.
3. Give each student two cards. On one card put a 1. On the other card put a 2. Ask if they would like to play game 1 or game 2. If they raise the #1 card, they go to Table 1 to play. If they raise #2 card they go to Table 2 to play. Students match objects to their beginning letters at each table.

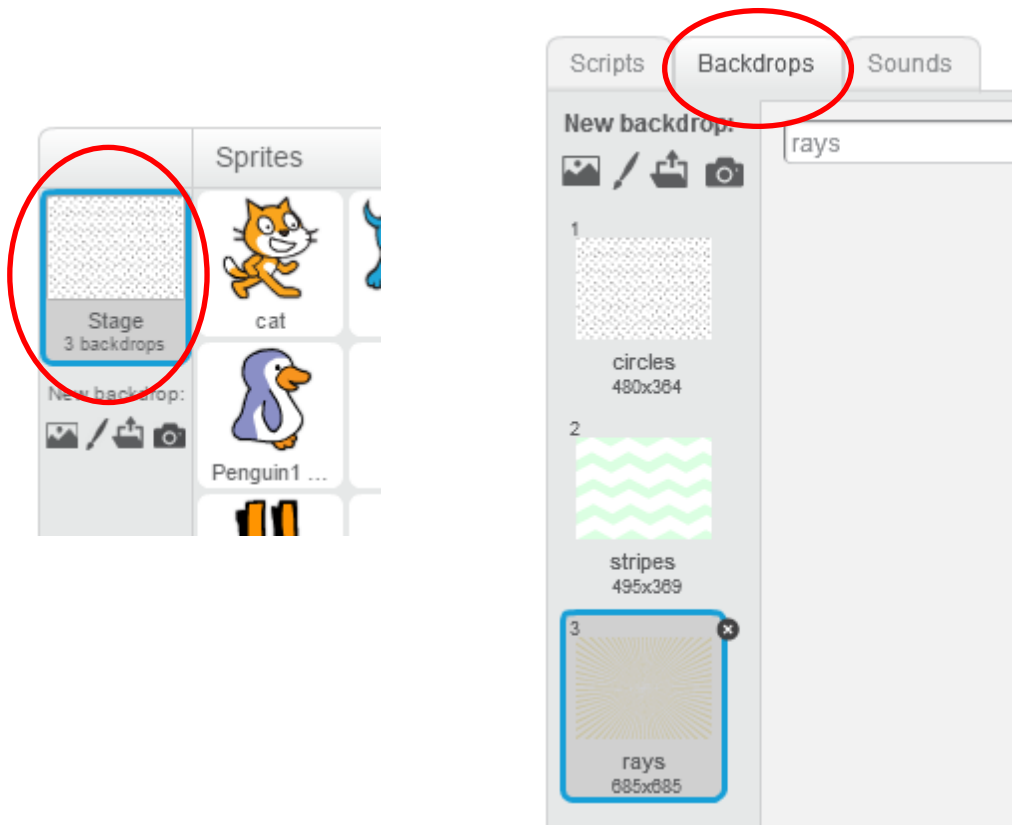
Activity:

1. Show students the completed project found at the **Link for Teacher**.
2. Play both games several times.

3. Show students the scripts for each animals. Pull apart the three blocks under the **When this sprite** clicked block and show what each does separately.
4. Show the students the **Link for Students**. Explain that the script is not working correctly. Tell them you will need their help in fixing the script. When the animals are clicked, they do not move.
5. Show the scripts for an animal and ask how to fix the script.
6. Allow time for students to “fix” the scripts for each animal in both games and share the project with others.

Extensions:

1. Show students how to change the backdrop of their game. First click the backdrop under the stage. Then click the backdrops tab. There are three backdrops already selected. Students click the backdrops tab. Then select 1, 2, or 3 as the backdrop.
2. Give students time to talk about and share their projects.



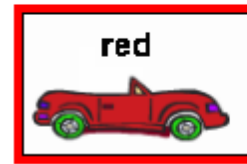
Title: Color Words

Summary: Students use color words from a drop down menu to make the cars go to the correct color box.



Common Core:

- (SL.K.2) Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- (RI.K.7) With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts.)
- (RF.K.4) Read emergent-reader texts with purpose and understand.



Programming Skills with Scratch:

- Use “green flag” to start a script
- Use “when this sprite clicked” block
- Choose a correct option from a drop down menu
- Locate a particular sprite’s script
- Debug or fix a script

Link for Teacher: <https://scratch.mit.edu/projects/118935812/#editor>

Link for Students: <https://scratch.mit.edu/projects/119963766/#editor>

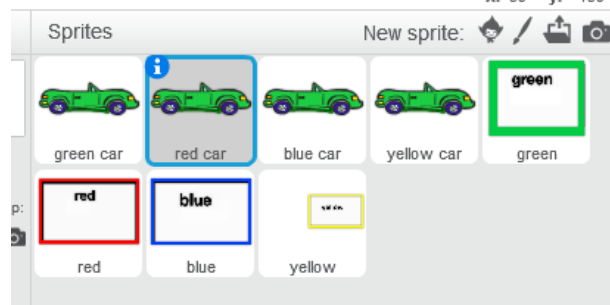
Unplugged Activity:

1. Write a list of site words on a long piece of paper. Be sure to include the color words, “red, yellow, green, and blue”. Roll the paper.
2. Hold up a red, yellow, green, or blue object. Ask students to unroll the paper with find the correct color word for the object. Repeat several times with different colored objects.

Activity:

1. Show students the completed project found at the **Link for Teacher** above.
2. Play the game several times. (Note: The cars are all green on the stage until the green flag is clicked.) Move the color word boxes around the stage. Play the game again. No matter where the boxes are on the stage, the cars will go to the correct box.

3. Show students how to find the scripts for each car by clicking on the sprite. Notice the sprites below the screen all show green cars, but their names are shown correctly. Click the red car sprite. Notice the red car is highlighted in blue below the stage. Clicking a sprite makes that sprite active. The red car's scripts appear in the script area.



4. Change the drop down menu to a different color and show what happens. (The red car will not go to the red box when it is clicked.) Ask student how to fix this. (Change the drop down menu to the correct color word.)
5. Separate the **go to** block from the **When this sprite clicked** block. What happens? (The car will not move.) Ask students how to fix this. (Link the blocks together again.)
6. Show the students the **Link for Students**. Explain that the script is not working correctly. Tell them you will need their help in fixing the script. When the cars are clicked, they do not go to the correct color word.
7. Allow time for students to “fix” the scripts for each car and share the project with others.

Extensions:

1. Encourage students to move the color words boxes around the stage and try their scripts.
2. Encourage the students to mix up the scripts. See if they can find a way to:
 - Make the cars go to the wrong colors.
 - Make all the cars go to the same color word.
3. Give students time to talk about and share their projects.