### Dragon in the Village Activity Series- Teacher Notes

### Setting the Stage:

This Activity Series is designed to bring the elements of a story to life, integrating literacy and Computer Science concepts in a hands-on, engaging way. The Activity content is based on the following narrative story, with each Activity incorporating the 123 Robot to help tell a piece of the plot. They can be used individually, or as a sequence, to help students practice a variety of concepts, like plot, sequence, and decomposition. The narrative provided here is an example story, and could be adjusted or changed to best meet the needs and interests of your classroom and topics of study.

Before your students begin working on the Activities, share the story with them.

Once upon a time, there was a peaceful village. The villagers lived in houses all across the fields, and the Royal Family who ruled over the village lived in a castle on the hill. The village was peaceful because the Royal Family had made laws about being kind and helpful to one another. When villagers had a problem, they often went to the Royal Family for help to solve it.

One day, the villagers heard a strange sound, and when they looked outside, they were surprised to see a dragon flying in the sky! The dragon was as big as a house and could breathe fire! The villagers called to one another and ran to the castle to get help from the Royal Family. When they arrived, the Royal Family brought everyone inside the castle and made sure all of the villagers were safe. Then together, they hatched a plan to get the dragon out of the village. First, they would need supplies from the village, so they set out to gather materials from the houses. Then, they used those materials to build a dragon pushing machine that would push the dragon out of the village. They worked hard to build everything they needed, and when they sent their dragon pushing machine out into the fields, the dragon was amazed and didn't know what to do! It seemed scared of the machine and left the village. The villagers celebrated together and lived happily ever after!

### Setting up the Activities:

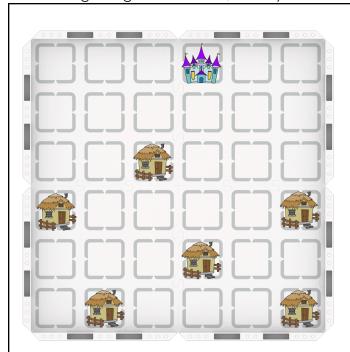
Each Activity highlights a particular plot point in the story. **Get to the Castle!** uses the 123 Robot to drive the villagers to the castle when they see the dragon in the sky. **Gather Materials** uses the 123 Robot to drive to villagers' houses to gather the materials needed to build a 'Dragon Pushing Machine'. **Push the Dragon** uses the Art Ring with a student-created attachment to push the dragon off the Field and out of the village. All Activities can use the same initial setup, like the one pictured below, and the 123 Robot will need to travel around the setting elements to accomplish its goals.

#### Making the Activities Your Own:

These Activities are editable Google docs, so you can easily change them to use a different book or story in your classroom. Choose the plot points of a story you are reading in class, and change the setting and character elements to use the 123 Robot to help students retell the story. Or you could use students' own stories that they have written, and create a custom activity that brings a student's work to life with the 123 Robot. See the following articles for more information about editing Google docs for your own classroom use with Google drive or with Microsoft Office.

### Setting up the Field:

Prior to beginning the Activities, have your 123 Field set up in the following way:



Have these **setting** elements taped to your Field:

- A castle
- Villager's houses

Have the following **characters** ready for the Activities:

- A dragon
- A Royal Family
- Villagers

Have the following **plot** materials ready for the Activities:

 Dragon Pushing device - use craft materials to construct a pushing attachment with the Art Ring.

#### **Materials Needed:**

- Paper & Markers/coloring materials
- Tape (to attach elements to the Field)
- Craft Materials (like pipe cleaners, straws, etc.)
- 123 Robot
- 123 Art Ring
- 123 Field

### **Teacher Tips:**

- For added dimension Attach your paper elements to blocks, so that they can stand up and be navigated around by the 123 Robot. Add a craft material to be collected in the Gather Materials Activity to each house, so that students can put it on the 123 Robot as they are collecting materials from the village.
  - Stand up your dragon for the **Push the Dragon** Activity, so that it can move as it is pushed around the Field. You may want to remove the Field walls for this Activity, so that the 123 Robot can actually make the dragon leave the Field.
- For a simpler setup Use dry erase markers to draw story elements onto the Field.
- For extra engagement Have students create the story elements themselves, by drawing their own dragon, houses, castles, villagers, and Royal Family. They can also assign character traits to their drawings, like making a villager who is a blacksmith, or a Royal Family member whose favorite food is broccoli.
- **Print and use the linked cutouts and characters** as your story elements, or as examples for students to use as they make their own. The characters are on Art Ring Canvases, that can be cut out along the solid lines, colored in, and inserted into the slots on the Art Ring.
  - <u>Letter Size Setting elements</u> and <u>Letter Size Characters</u>
  - A4 Size Setting elements and A4 Size Characters

To print your own blank Art Ring Canvas Templates for student use, use the following links:

- Art Ring Canvas Template Letter Size
- Art Ring Canvas Template A4 Size

To learn more about using the 123 Art Ring and Canvas, see this article.

# Additional Standards That Can Be Reached with this Activity Set: Common Core State Standards - ELA

- CCSS.ELA-LITERACY.RL.K.2 With prompting and support, retell familiar stories, including key details.
- CCSS.ELA-LITERACY.RL.K.3 With prompting and support, identify characters, settings, and major events in a story.

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# ✓E×123 Activity

# Get to the Castle!

## Play

### Get the villagers to safety in the castle.



Put your 123 Robot on the Field, in an empty square, like this.



Put your villagers on the Put it on your 123 Robot.







Drive your 123 Robot to the castle to bring the villagers to safety.



Did your villagers get to the castle?

# Challenge

## Write the story!

Draw or write your own retelling of this part of the story. Why do the villagers need to go to the castle in your story?

### Get more villagers!

Put a villager at each house in the village. Code your 123 Robot to bring each one to the castle.

**Standard:** CSTA 1A-AP-10: Develop programs with sequences and simple loops, to express ideas or address a problem.

# ✓E×123 Activity

## **Gather Materials**

## Play

## Gather the materials from the village and bring them to the castle.



Put your 123 Robot on the Field, next to the castle, like this.







Drive your 123 Robot from the castle to the houses to gather the materials the villagers need.



Drive your 123 Robot back to the castle so the villagers can start building.



Did the materials get to the castle?

# Challenge

#### Add a cart!

Create a cart to attach to your 123 Robot with the Art Ring, so that it can pull the materials gathered back to the castle.

## Watch out for the dragon!

Add the dragon to the Field. Code your 123 Robot to get to the houses without touching the dragon.

Standard: CSTA 1A-AP-10: Develop programs with sequences and simple loops, to express ideas or address a problem.

# ✓E×123 Activity

# **Push the Dragon**

## Play

### Build a Dragon Pushing Machine to push the dragon out of the village.



Put the dragon in the village, and your 123 Robot on the Field, next to the castle, like this.



Build a dragon pusher on the Put it on your 123 Robot to make a Dragon Pushing Machine.







Drive your 123 Robot to push the dragon out of the village.



Did your Dragon Pushing Machine work? Is the village safe from the dragon?

# Challenge

## Oh no! More dragons!

Add more dragons to the Field. Can you code your Dragon Pushing Machine to push all of them out of the village?

### Make it better!

What could you change about your dragon pusher to make your machine work better? Try it and test your new machine to see if it works.

Standard: CSTA 1A-AP-10: Develop programs with sequences and simple loops, to express ideas or address a problem.

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