## Educational Relevancy | Systems Thinking

### KART KINGDOM: PLAYER IMPACT GUIDE

**Ages 6+ | 30m+**

“Though video games can be quite different from hide-and-seek and Monopoly, they can offer some of the same benefits: team play, for example, or strategic thinking skills.”

-- Video Games: Grade Schoolers, PBS Parents

### ABOUT KART KINGDOM

PBS KIDS *Kart Kingdom* is a game for younger audiences to learn the basics of systems thinking. In the game, players explore the world, craft items, and customize characters. As the player crafts items, called gadgets, these gadgets help and change how the player moves through a level. Sometimes, more than one gadget can be used to complete a puzzle and the player must decide which is the best tool for the job. For more information, visit: kartkingdom.org

### THEME FOR THIS GUIDE: Systems Thinking

*Kart Kingdom* can help players develop systems thinking skills. Systems thinkers approach problems by understanding the relationships among the interacting elements of a system, rather than focusing on its parts. A systems thinker can identify elements of a system, recognize that a system’s design generates behavior, explain causal relationships that are spread across system components, and make choices that affect function in relationship to desired outcomes.

### WHY USE THIS GUIDE?

In this guide, we invite you to think about *Kart Kingdom* as a game system that is affected by player choices. Throughout the game the player is challenged to create tools and gadgets that solve puzzles in the system.

*Use the questions below to guide your play and discussion with others. If you’d like to, record your answers on a separate sheet of paper.*

#### GAME BASICS

- Start a quest. Notice the components of the levels as you move through them.
- In the quest you can collect small floating items. What are they for?
- Craft a gadget. Do you do in order to craft gadgets?
- Craft two gadgets that offer similar features (ex: balloons, helicopter). Use each one and pay attention to the differences.

#### THEME INSIGHTS

- What are the components of the levels that you played through? How do they work together?
- When you are creating a gadget what do you need? What happens when you do not have the required items?
- When you can choose more than one gadget for a puzzle, what do you consider when making your choice?
- What can you craft besides gadgets? What do those items do?

#### WORLD CONNECTIONS

- Think of a system you experience everyday (ex: phone, water, roads). What are the components of this system?
- How does a problem or breakdown in one part of this system affect the use of this system as a whole?
- Who are the participants in this system?
- Imagine the various participants’ perspectives. How are they affected differently by a breakdown in the system?
- What are possible solutions to a breakdown in the system? How are the system, and its participants, affected by the possible solutions?

**Bonus Challenge:** Think about another game you like to play. Consider this game, and you the player, as part of a system. What are the components that make the system run, and how are you a part of that system as a player? Create a web video with your ideas to share with your friends, family, or classroom.