# SPARK: Simple Play Adaptations to Reference for Kids

## Space Shuttle with Joystick Control

| Description: | Image: |
|---|---|
| The NASA space shuttle replica vehicle is adapted with an easy-to-grab, easy-to-use joystick remote. It can be moved forward, backward, and turned to the left and right. The Shuttle has two modes—lights only or lights and sound. Shuttle size is: 9″L x 5″W x 4″H and remote size: 7″L x 6″W x 10½″H. Shuttle requires 4 AA batteries; Remote requires 2 AA batteries. |  Purchasing Information<br><br>Users Manual |

Who Might Benefit?

| Those who… |
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| • Need high engagement activities to help with sustained attention to task. For some children vehicle play may be highly motivating because it is a special interest.<br>• Need to further develop directionality skills (forward, back, right, left, over, under, around, etc).<br>• Benefit from simple cause and effect activities in which the child does something (pushes the joystick) and the vehicle instantly moves.<br>• Have fine or gross motor challenges and are unable to engage in typical vehicle play activities. They may have difficulty getting down on the floor, moving on the floor, reaching, grasping, and/or manipulating typical toy cars.<br>• Have motor or communication challenges such that they may be future candidates for a power wheelchair, communication device or computer where alternate access will likely be via a joystick. |

Why Use?

| Provides an opportunity to… |
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| • Engage in vehicle/car play.<br>• Participate in visual tracking activities.<br>• Engage in cause and effect play.<br>• Develop an understanding of directionality (under, over beside, in front, behind etc.).<br>• Participate in an engaging activity with multi-sensory supports (music, sound, visual, etc.). |

| Instructions for Use: | Adaptation Ideas: |
|---|---|
| Environmental Considerations | Optional Additional Materials/Supplies<br>• Foam Board |

- A large space will be needed in which to use the remote-controlled vehicle so the child is not running the vehicle into other children.
- Initially the large space should be relatively flat and smooth for the most success in using the remote-controlled vehicle.
- May not be suitable for quiet environments due to the sounds and lights on the vehicle.

Positioning

- Children typically play with cars on the floor moving into and out of a variety of positions while playing. Make sure the child can see the car and can freely move into and out of a variety of positions (e.g. on tummy, sidelying, sitting, kneeling, crawling, etc.) while playing with the toy.

Alternate Positioning

- Place the vehicle on a table or similar surface so the user can see and hear the vehicle at eye level. Be careful the vehicle does not fall off the table (see containment options below if you need the vehicle at eye-level).

Basic Play/Use

- Encourage the child to activate the remote control vehicle to experiment with cause and effect (stopping and starting the car), moving the car in different directions, and moving their body along with the vehicle.

Extended Play/Use

- Set up an obstacle that requires the child to navigate the vehicle through the obstacles while verbally labeling the directions as the child plays (e.g. around, under, over, beside).
- Ask the child to go around, under, over, beside, behind, and in front of obstacles as a part of a pretend/imaginative play scenario (e.g. Let's drive the space

- Velcro
- Dycem
- Packing Tape
- Painters Tape
- Foam Tape

Build It Up

- The joystick on the vehicle is a fairly large ball type grip but the grip could be enlarged for a larger grip with foam tape, etc.

Stabilize It

- Use Velcro, non-skid shelf liner, or Dycem (non-skid matting) to stabilize the controller on a table or the floor.

Simplify It

- Block some movements of the joystick so there are fewer directions to manage (forward and backwards only).

Contain It

- Use a large tray, hula hoop, or box with the sides cut down so the child can see into the box to contain the vehicle if placed on a tabletop surface or even on the floor.

Add Sensory Cues

- Toggle on or off the additional lights and music if needed to reduce or increase the level of sensory input.

Communication Support

- Visual supports (non-transient cues) such as directionality cards (stop, go, around, under, beside, etc.) can be used to pair with verbal directions (transient cues) provided to the child to help them learn about the way things and people move in space.

Alternative Uses

- Attach marker to the car with tape or Velcro and place the car on a large sheet of paper for a drawing activity.
- Remote vehicles can become anything during play by taping or velcroing on a cardboard replica of something other than a vehicle. For example a cardboard soccer

shuttle under the table to go to the launch pad).
- Make a runway on the floor out of painters tape and ask the child to drive the shuttle on the road.
- Add traffic signs to the road to teach traffic safety.

Play/Use with Others

- Encourage the child with the remote-control vehicle to play with other children during typical vehicle play scenarios.
- Have another child build up a tower of blocks then ask the child with the remote-controlled vehicle to drive the vehicle to knock down the tower.
- For children who lack the motor ability to play movement games, use the remote-control car to play Red Light Green Light as a way to represent the child's movement in the game.

player can be taped on each side of the vehicle (to hide the vehicle) and then the vehicle becomes a soccer player who can kick a ball rolled by another child, while the child with the remote controller advances the soccer player to the ball to push it (kick it).

Additional Considerations:

- This toy has the option of lights only or lights and music. Some children may find the lights and/or lights and music challenging due to the multi-sensory stimulation provided by the toy.
- Batteries are required to be installed in both the vehicle and the remote for the vehicle to work properly.

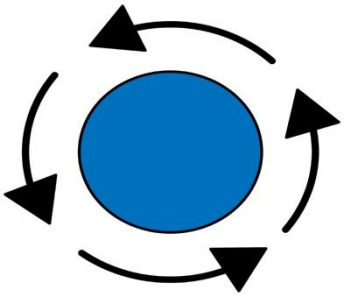
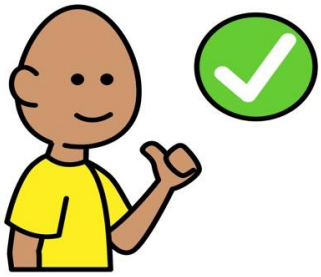
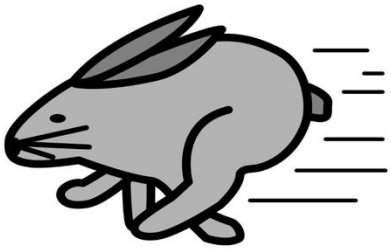
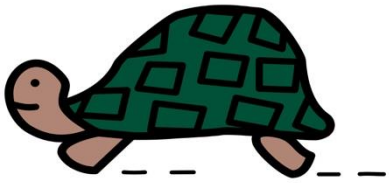
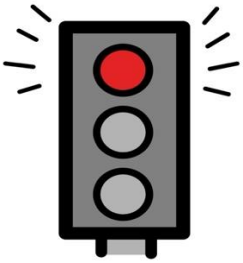
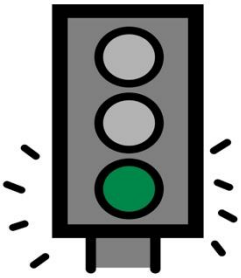
Resources:

- OCALI Grab and Go Gallery of Resources: Turn Taking https://www.ocali.org/project/resource_gallery_of_interventions/page/Turn-Taking-Supports
- OCALI Grab and Go Gallery of Resources: What to Do Cards https://www.ocali.org/project/resource_gallery_of_interventions/page/What-to-Do-Cards

Ohio Early Learning Standards:

- MA: Geometry: Develops understanding of spatial relationships (4.b.)
- SC: Science Inquiry and Application: Develops ability to reason about cause and effect. (1.b.)
- CO: Problem Solving and Reasoning: Uses increasingly complex strategies to solve problems (3.a.)

Words to Encourage Play/Use

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|---|---|---|
| Under  | Around  | Done  |
| Fast  | Slow  | Help  |
| Stop  | Go  | Push  |

*"Adaptations" adapted from: Haugen's Modes for Adapting Toys based on materials from the "Let's Play" Project at the University of Buffalo

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