



# The Right Tools for the Task Lesson Plan

**Overview:** In this lesson, students learn about the use of different tools.

**Grades:** Preschool and K-3

**Length of Lesson:** 30-45 minutes

**Related Video:** “Vulture’s Statue” episode

## Learning Goals:

After completing this lesson, students will be able to:

- Define what a tool is.
- Describe several different tools and how they can be used.
- Explain that different tools have different uses.
- Discuss that tools make it easier for us to do things and help us do things we might not be able to do without them.

## Related Goals from the Space Racers™ Curriculum:

### Scientific Inquiry

**Observation:** Looking carefully is one way to learn about things around us.

- Take note of a variety of properties and describe as accurately as possible (e.g., number, shape, size, length, color, texture, weight, motion, temperature, other physical characteristics, etc.).
- Make comparisons to identify similarities and/or differences.
- Inspect/investigate in detail in order to sort, group, classify, or sequence according to size or other characteristics.
- Develop questions and predictions based on observations.
- Communicate findings verbally or by using pictures, graphs, charts, and/or representations.

**Tools:** Tools can be used to help us obtain more information about things.

- Understand that the purpose of tools is to enable us to do things better, or to do some things that otherwise could not be accomplished at all.
- Define a goal in a given situation or experiment and compare tools to determine which would be most helpful in achieving the goal.
- Examples of tools:
  - *Computers:* Help us to gather information, learn new things, problem solve, and communicate.
  - *Telescopes:* Help us to see things in our solar system that are far away.
  - *Rockets:* Used to carry people and things into space.
  - *Satellites:* Spacecrafts that collect information, measurements, and pictures from a planet and send them back to Earth.

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- *Robots*: Can help us to carry out tasks (e.g., collect information, take pictures, etc.) as we explore.
- *Basic Household Tools*: Common tools, such as scissors, pencils, hammers, wrenches, and screwdrivers can help us to complete tasks.

## Materials:

- “Tools for the Task Cards”
- “Activity List”
- tape
- paper and crayons

## Prep:

- Print and cut out each cards in the “Tools for the Task Cards” handout.
- Print out one copy of the “Activity List.”

## Lesson Activities:

### Activity 1: Finding the Right Tool

1. Place all the tool cards in a pile, setting aside the “scissors” card. Hold up and show your students the “scissors” card and ask them to tell you what object they see on the card. Ask them to describe what scissors could help them do. (*Cut a piece of paper, etc.*) Show and discuss the rest of the cards, one a time. After you have discussed all the cards, shuffle them.
2. Divide your students into two teams. Hand each team half of the tool cards.
3. Explain that you are now going to play a game. You are going to call out an activity or problem that needs to be solved and the teams need to find a tool among their cards that could be used to conduct that action. For example, if you said you wanted to cut a piece of paper, what tool could be used? (*A pair of scissors.*) Explain that the team with the pair of scissors would then hold up their card and then bring it to you. The team that gets rid of all their cards first wins.
4. Explain that for some of the activities, there might be more than one right answer. So, if a team has more than one card that could be used to complete the activity they can present all the cards that would fit. Also, both teams might each have a tool that could be used to complete the same task.

#### *Tips:*

- To make the game a little harder, allow each team to only get rid of one card at a time.
  - In the “Activity List” we have included a list of possible tools that could be used to complete each activity. However, we encourage you to have your students think creatively about how different tools good be used to complete different tasks. Therefore, students might think of other tools that good be used to complete a specific activity. If it is not clear how a tool could be used to complete a given task, ask the team to defend its choice. For example, for the “scooping sand” task, although shovel or bucket might be the most obvious answers, students could also make a case for using a spoon. Similarly for “carry a lot of things,” although backpack and suitcase might be obvious answers, a team could also illustrate how a blanket could be used for the same purpose.
5. Play the game until one team has gotten rid of all its cards. If no team has gotten rid of all its cards, read through the task list again, until one team has gotten rid of all its cards and won the game.

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*Tip:* If a few students have cards left at the end, look at their remaining cards and think of some new tasks that could be completed with those tools.

6. Collect all the cards, mix them up and play the game again.
7. After finishing the game, ask students to discuss something they learned from the game. (*Some tools can be used to complete different tasks. Some tasks (such as writing a letter) can be completed with a variety of tools.*)

*Non-Competitive Option:* Instead of dividing the class into teams, spread out all the cards in front of the class face up for everyone to see. Encourage your students to work together to find one card that could be used to complete each activity that you call out. Challenge the class to try to get rid of all their cards.

## Activity 2: What is a Tool?

1. Ask your students to list some tools.
2. Ask them to come up with a definition of a tool. In addition to tools such as hammers, screwdrivers, etc., let them know that the things we just had on our picture cards in the game—scissors, tape, rulers, fork, etc. are also tools. Given that information, ask students to think about whether they want to change their definition. Explain that a tool is anything that helps us do something better or something that we could not do without its use.
3. Ask them to list any other tools they can think of.

## Activity 3: Vulture's Statue

1. View the Space Racers™ "Vulture's Statue" episode
2. After watching the episode, ask your students to name some of the tools used in the episode (*magnifying glass, telescope, screwdriver, hammer.*)
3. Ask students what the characters used the magnifying glass for. (*To see things more closely and melt a comet.*)
4. Ask students what was the main thing that Coot told the Space Racers about tools. (*The right tools get the job done.*) Discuss what this means. (*Different tasks require different tools. Specific tools can help us successfully complete tasks.*)

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## Activity 4: What Tool is on My Back?

1. Gather the tool cards. If you discussed other tools during the lesson that aren't on the cards, have students draw those other tools, drawing each one on a separate piece of paper.
2. Tape a tool card to the back of every student, so that each student has a tool taped to his/her back. (If you have more than 40 students, make multiple copies of the tool cards, so that each student has one.)
3. Have students walk around the room with the cards on their backs and try to find out what tool they have on their back by asking students questions, such as the following: "Is this something we have in the classroom?" "Is this something that cuts paper?" "Is this something that we use when eating?" etc. The other students can answer "yes" or "no" to these questions and can also give the person a clue about what is on their back. For example, if one student has the suitcase, one student could say, "you can use this to carry things," and another student could say "you can take this with you when you go on a trip." Once a student thinks they know what card is on their back, they can guess by asking, "Am I a suitcase (or whatever object they think they have on their back)?"
4. Once all the students have figured out what tool is on their backs, reshuffle the cards and play the game again.

## Wrap-up:

1. Ask students to discuss something that they learned in today's lesson. (*Some tools can be used to do multiple things; Some tasks can be completed by several different tools. Tools have specific uses/functions; Tools are things that make it easier for us to do things.*)
2. Hand out sheets of paper and crayons. Ask students to draw pictures of one of the tools that they discussed in today's lesson. Ask each student to discuss their drawing and why they chose that tool and to describe a few facts about that tool. Post the pictures of the tools for all to see.





# Tools for the Task Cards

The cards in this handout are designed to be used with the Space Racers “The Right Tools for the Task” lesson plan.





**alarm clock**



**airplane**



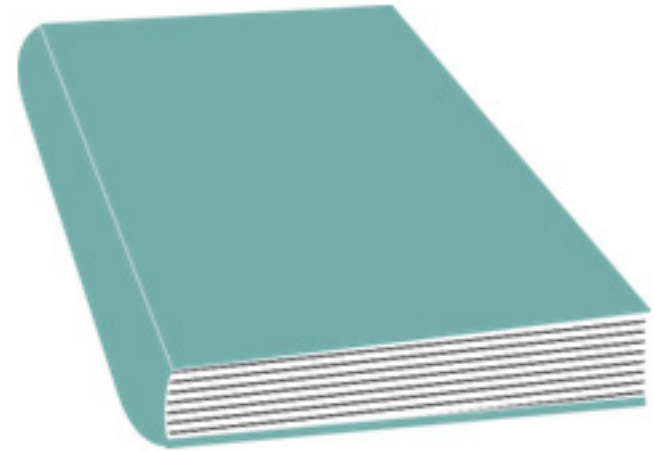
**backpack**



**blanket**



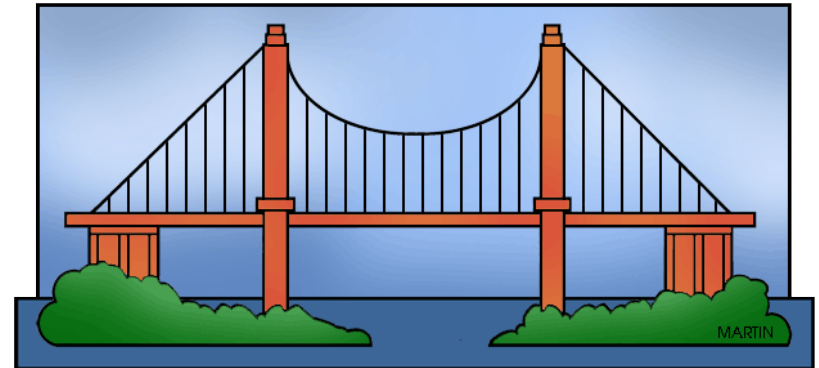
**boat**



**book**



**bottle of water**



**bridge**





**broom & dustpan**



**bucket**



**car**



**comb**





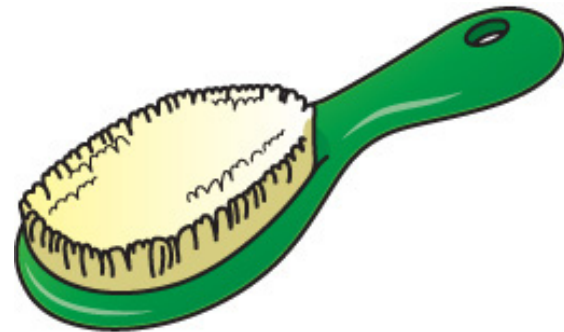
**computer**



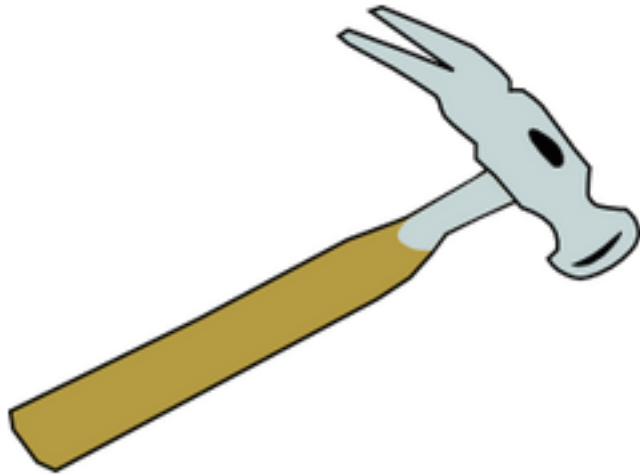
**fork**



**glue**



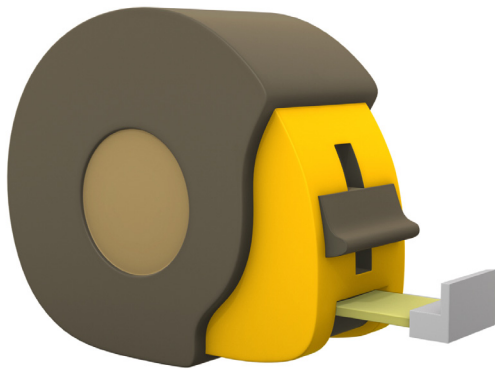
**hairbrush**



**hammer**



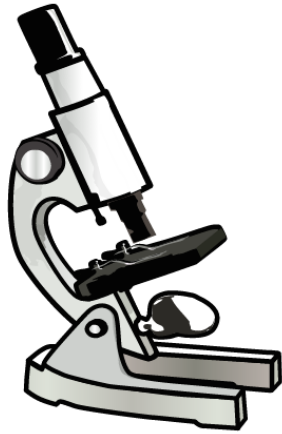
**magnifying glass**



**measuring tape**



**microphone**



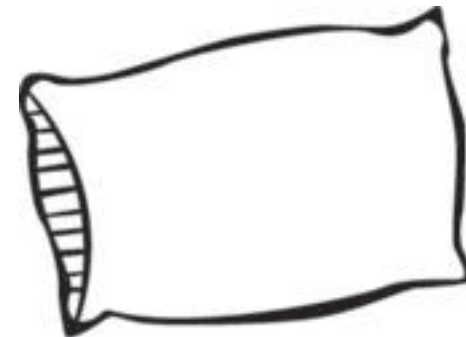
**microscope**



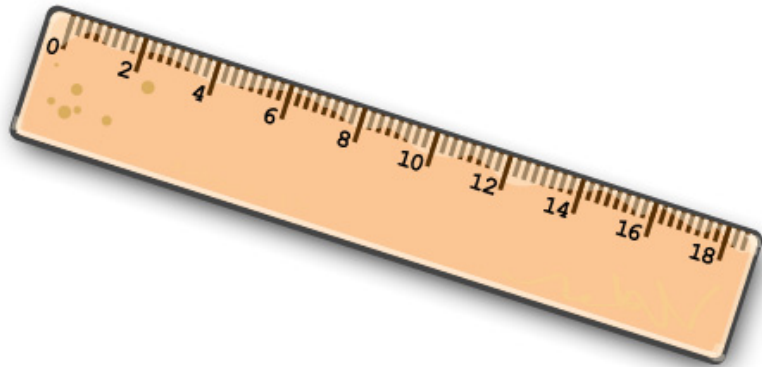
**paintbrush**



**pencil & paper**



**pillow**



**ruler**



**scissors**

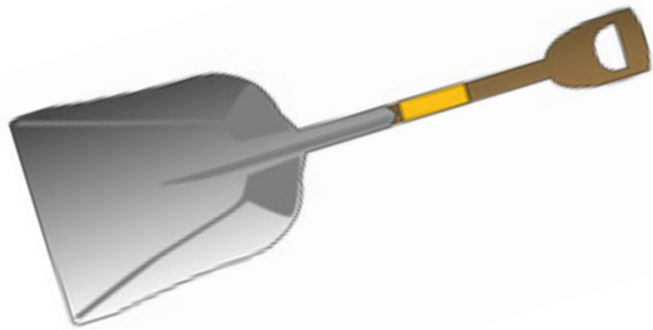


**screwdriver**



**shopping cart**

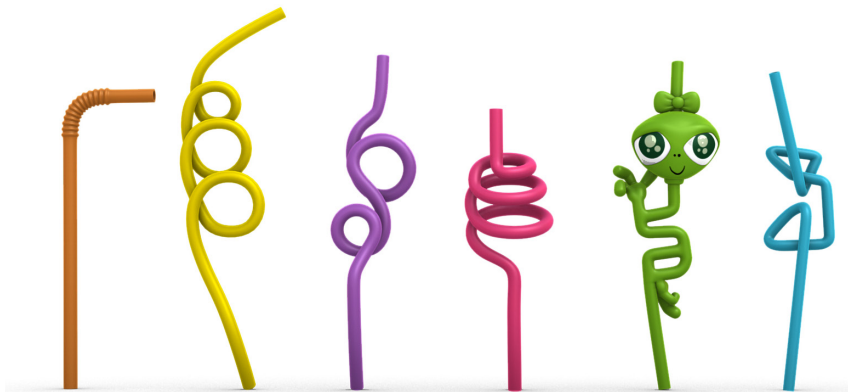




**shovel**



**spoon**



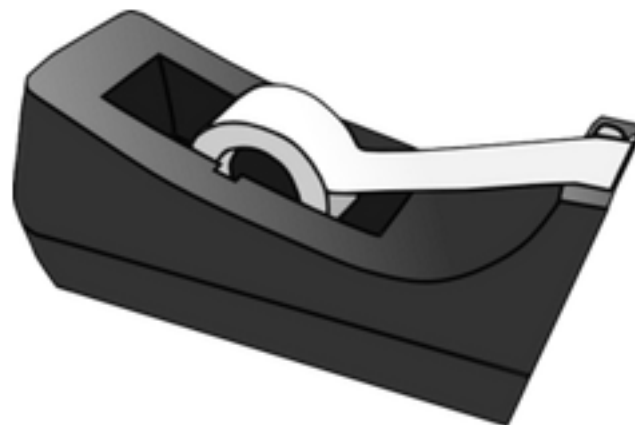
**straws**



**suitcase**



**tablet**



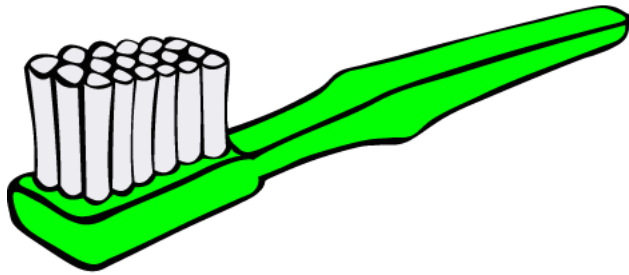
**tape**



**telephone**



**telescope**



**toothbrush**



**toothpaste**



**train**



**vacuum**



## The Right Tools for the Task

### Activity List

This list is designed to be used in the Space Racers “The Right Tools for the Task” Lesson. Read off the activities in the left hand column and have your students find the appropriate tool cards.

Activities	Possible Tools
cut a piece of paper	pair of scissors
drink something	bottle of water, straws
look at stars, planets and things that are far away	telescope
talk to someone who is not in the same room	telephone, computer, tablet
write someone a message	pencil & paper, computer, phone
eat something	fork, spoon
clean up some dirt on the floor	broom and dustpan, vacuum
travel to another country	airplane, boat, car, train
look at things that are very small	microscope, magnifying glass
measure the length of a table	ruler, tape measure
read something	book, computer
carry a lot of things	backpack, shopping cart, suitcase
keep teeth clean	toothbrush, toothpaste
make a sand castle	shovel, spoon, bucket
hammer in a nail	hammer
make hair look nice	comb, brush
move things from one place to another	shopping cart, train, boat, airplane
keep body warm	blanket
keep head comfortable when lying down	pillow
wake someone up in the morning	alarm clock, phone
attach a picture to a piece of paper	glue, tape
take a picture	camera, phone, tablet
make a voice sound louder	microphone
paint something	paintbrush
scoop up sand	shovel, spoon, bucket
tighten a screw	screwdriver
go across a body of water	bridge, boat, airplane
travel somewhere with a large group of people	train, boat, airplane