

Scope and Sequence

Space Exploration Robotics

Subject: Language Arts Grade: 6 Designer: Tina Lewis

Week 1

Students will explore ideas about robots and write about an idea for a robot based on need, and supported with evidence, elaborations and examples. They will present these ideas to the class, with discussion about their relevance.

TEK ELA 6.5F

- TLW clarify and support spoken ideas with evidence, elaborations, and examples

TEK ELA 6.15A

- TLW write to express, discover, record, develop, reflect on ideas, and problem solve
- http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Hands-on_Aircraft_Design_Activity.html
<http://www.basd.net/technology/STEEP/Technology/3.7/My%20Own%20Robot.htm>

[htm](#)

Week 2

Students will read “Charlie and the Chocolate Factory” and reflect on the benefits vs. detriments of robots, reflecting on presentation and discussions from week 1.

TEK ELA 6.13.A

- Form and revise questions for investigations, including questions arising from readings, assignments, and units of study

<http://www-robotics.jpl.nasa.gov/projects/index.cfm>

<http://www-robotics.jpl.nasa.gov/systems/index.cfm>

TEK ELA 6.12G TLW recognizes story elements related to chosen robotic; realistic characters, plot, setting and problem resolution

<http://www.nasajobs.nasa.gov/astronauts/content/broch00.htm>

<http://www.nasajobs.nasa.gov/astronauts/content/faq.htm>

<http://www.ksc.nasa.gov/facts/faq12.html>

Week 3

Students will research a NASA robot, describe its intended use and how astronauts would function with and without the robot

6.20F TLW evaluate his/her own research and raise new questions for further investigation

6.25F TLW make connections across content areas and use and reuse language and concepts in different ways

<http://www-robotics.jpl.nasa.gov/tasks/index.cfm>

<http://www-robotics.jpl.nasa.gov/publications/index.cfm>

Week 4

TLW compare the use of the chosen robot in space to its potential use in society, including the benefits and liabilities to society

<http://store.irobot.com/home/index.jsp>

<http://www.botmag.com/>

<http://www.robots.com/>

http://ranier.hq.nasa.gov/telerobotics_Page/coolrobots.html

Week5

From their research, students will create a robot to eliminate the need for EVA. Students will need to persuade NASA to choose to build their robot.

6.10A TLW use his/her own knowledge and experience to comprehend

6.11A TLW offer observations, make connections, react, speculate, and raise questions in response to texts

6.11D TLW connect, compare, and contrast ideas, themes, and issues across text

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Week6

Students will prepare persuasive presentations for their robot.

6.4A TLW connect his/her own experiences, information, insights, and ideas with experiences of others through speaking, and listening.

6.5A TLW adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion