

WRITING PROMPT

6

MAGNETS AND MOTORS

Prompt

On Friday, you will teach a 4th grader how to make an electromagnet. Clearly write out the steps to this process. Remember to list all materials that are needed and use signal for order such as first, next, then and finally in your explanation. Draw and label an illustration to go along with your written directions.

Word Walls

*electricity
magnets
electromagnets
troubleshooting
magnetic poles
short circuit*

Writing Standards

- E2a – Report Writing
- E2b – Response to Literature
- E2c – Narrative Account
- E2d – Narrative Procedure

Science Standards

- S1 Physical Sciences Concepts
- S2 Life Sciences Concepts
- S3 Earth and Space Sciences Concepts
- S7 Scientific Communication

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- *Brainstorm a list of all electrical devices you used yesterday.*
- *We have been asked to cut back on electricity. If you could only use 5 devices from your list, which 5 would you keep. Explain why you chose these five devices and how your life would change now that the use of electricity is limited.*

Word Walls

electricity
motors
automatic switching
short circuit
electromagnets

Writing Standards

- E2a – Report Writing
- E2b – Response to Literature
- E2c – Narrative Account
- E2d – Narrative Procedure

Science Standards

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- S3 Earth and Space Sciences Concepts
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QUICK WRITES

GRADE 6

Magnets and Motors

Lesson No.

- 1 *Write what you know about magnets and motors.*
- 2 *List the characteristics of the magnets.*
- 3 *Predict what materials your magnet will be attracted to.*
- 4 *If you repeated today's experiment, would you always get the same results? Why or why not?*
- 5 *Think of a place where a compass might come in handy. Tell me why you would need it.*
- 6 *Tell me why it is important to know your geographical location.*
- 7 *Explain why it is important to follow safety procedures when working with electricity.*
- 8 *Write three questions that you have concerning magnets and electricity.*
- 9 *Think about the electromagnet you built in the last lesson. Predict how you could make it stronger. How could you make it weaker?*
- 10 *What will happen to the wires and battery if you leave the switch on too long?*

- 11** *Reflect on your presentation and rate yourself 1 – 10 (10 the best) and tell how you could improve your score. Explain your graph.*
- 12** *Explain the difference between attract and repel.*
- 13** *Describe your frustration in building your spinning coil motor.*
- 14** *Write what surprised you most about the inside of an electric motor.*
- 15** *Write about how good it makes you feel when you understand how something works.*

WORD WALL

Magnets and Motors

magnets	electricity	shaft
motors	electromagnets	automatic switching
ferrite	coil	motion
compass	poles	brushes
polarity	motor	commutator
troubleshooting	attracted	magnetic poles
north-seeking pole	repelled	short circuit
south-seeking pole	armature	