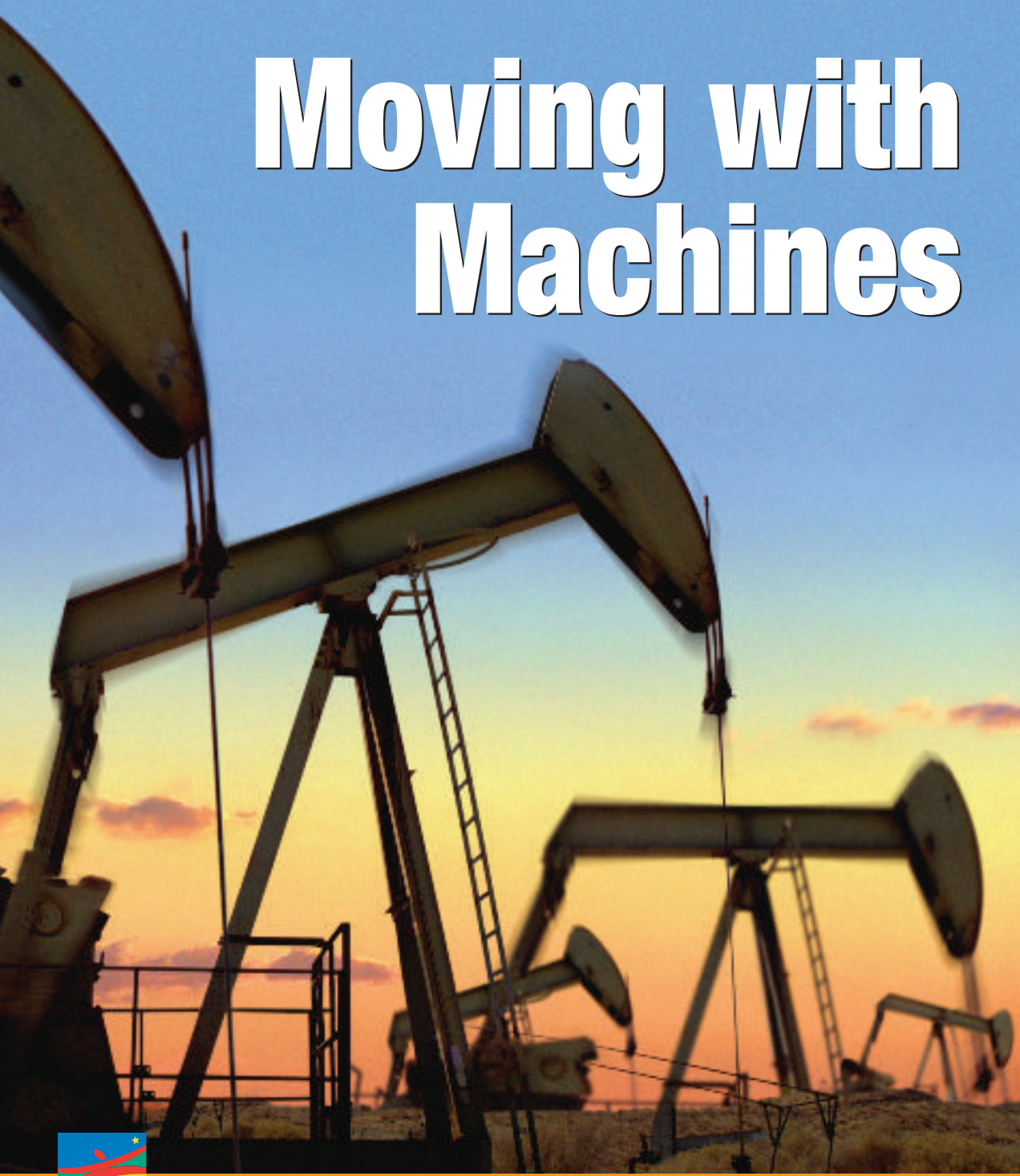
Moving with Machines



by Michelle Schaub

Benchmark EDUCATION

Level 20 K Word Count: 272*

The Big Idea

Machines help people move heavy things. We can pull and push objects with the help of machines.

Skills at a Glance

Monitor-Reading:
- Stop, think, and write

Comprehension:
- Summarize information

Phonics:
- -er and -or endings (lever, other, soccer, tractor, water)

Fluency:
- Read with appropriate stress or emphasis

Tier Two Vocabulary:
- change

Tier Three Vocabulary:
- force, lever, motion, position, pull, pulley, push

Grammar, Word Study, and Language Development:
- Use the helping verb "can"
- Use antonyms (can/cannot, force/motion, heavy/light, more/less, push/pull)

Sentence Pattern:
- People use ___.

* Numerals, vocabulary words on pages 2 and 3, and words in photo captions, labels, diagrams, and charts are not included in the word count for this book.

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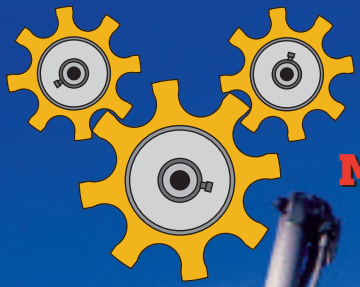
How do people move things?



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by
Michelle Schaub

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I need to know these words.

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beam



bucket



pull



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push



tractor



wheelbarrow



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What Is Motion?

The ball moves. The ball is in **motion**. Motion is a change in **position**.



▲ The boy throws the football. The football is in motion.

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This soccer ball is in one position. The boy kicks the ball. Then the ball is in a new position.



▲ The soccer ball moves. The ball changes position.

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Look at this bag. The woman makes the bag move. The woman **pulls** the bag. The woman uses a **force**.



▲ This woman uses a force. This woman pulls the bag.

You can pull some things. You can **push** some things. You use a force to push.

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▲ The children push the bicycles.

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How Do We Use Force?

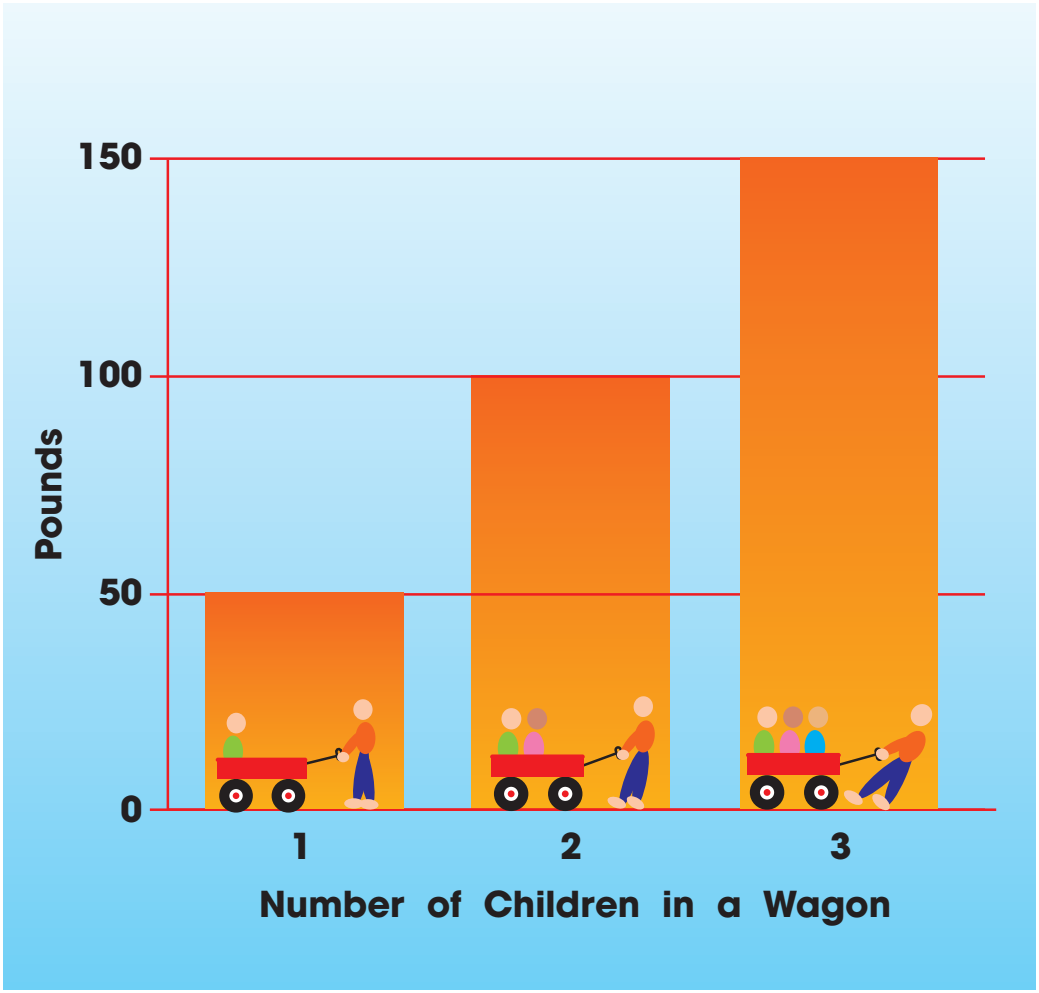
This girl wants to move a bucket. This girl uses a force. The girl pulls the bucket off the ground.



▲ The girl uses a force to move the bucket.

People use less force to move light things. People use more force to move heavy things.

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▲ A person uses less force to pull one child.
A person uses more force to pull three children.