Name: _____ Date: _____

Packing a Wheelbarrow the Smart Way

Circle group

A wheelbarrow helps you carry heavy things. It can carry soil, bricks, or leaves. It is a lever. A lever is a bar that turns around a point. A wheelbarrow turns around its wheel.

The handles are far from the wheel. The load is in the tray, near the wheel. So a small push on the handles can lift a heavy load.

Here is how to pack it well.

First, put the heavy things at the front, near the wheel. The wheel holds most of that weight. You do not have to.

Next, keep the load low. A tall pile can tip over. A flat load is steady.

Then, do not fill the tray too full. A heavy load is hard to steer.

Last, lift the handles slowly. Walk at an easy pace. The wheel rolls. You push and steer.

Questions

1. What kind of simple machine is a wheelbarrow?

_____

_____

2. Where are the handles compared to the wheel?

_____

_____

3. Where should the heavy things go in the tray?

_____

_____

4. Why should you keep the load low?

_____

_____

5. What does the wheel do for the person?

_____

_____

6. Why is a heavy load near the handles harder to lift than one near the wheel?

_____

_____

Words to know

wheelbarrow: a small cart with one wheel and two handles
lever: a bar that turns around a point to help lift things
load: the things that are being carried
steady: firm and not shaking or wobbling
steer: to guide which way something goes

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Packing a Wheelbarrow the Smart Way

Triangle group

A wheelbarrow helps people carry heavy loads like soil, bricks, and fallen leaves. It is a kind of lever. A lever is a bar that turns around a point, and a wheelbarrow turns around its wheel and axle.

The handles are far from the wheel. The load sits in the tray, close to the wheel. That is why a small push on the handles can lift a heavy load.

Here is how to pack a wheelbarrow the smart way.

First, put the heaviest things near the front, close to the wheel. The wheel will carry most of that weight, and you will not have to.

Second, keep the load low. A tall, wobbly pile can tip over. A flat load stays steady.

Third, do not fill the tray too full. A load that is too heavy is hard to steer and hard to lift.

Last, lift the handles slowly and walk at an easy pace. The wheel does the rolling, so you only have to push and steer.

Questions

1. What kind of simple machine is a wheelbarrow?

_____

_____

2. Where are the handles in relation to the wheel?

_____

_____

3. Where should the heaviest things go in the tray?

_____

_____

4. Why should you keep the load low?

_____

_____

5. What does the wheel do for the person using the wheelbarrow?

_____

_____

6. Why would a heavy load near the handles be harder to lift than one near the wheel?

_____

_____

Words to know

wheelbarrow: a small cart with one wheel and two handles
lever: a bar that turns around a point to help lift things
load: the things that are being carried
steady: firm and not shaking or wobbling
steer: to guide which way something goes

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Packing a Wheelbarrow the Smart Way

Square group

A wheelbarrow helps people carry heavy loads such as soil, bricks, and fallen leaves. It is a kind of lever, which is a bar that turns around a fixed point. In the case of a wheelbarrow, the turning point is the wheel and its axle.

The handles are positioned far from the wheel, while the load rests in the tray close to it. Because of this arrangement, a small push on the handles is enough to lift a surprisingly heavy load.

Here is how to pack a wheelbarrow the smart way.

First, place the heaviest items near the front, close to the wheel. The wheel will support most of their weight, so you will not have to.

Second, keep the load low. A tall, wobbly pile may topple over, whereas a flat load stays steady.

Third, avoid filling the tray too full. An overloaded wheelbarrow is difficult both to steer and to lift.

Finally, raise the handles slowly and walk at an easy pace. Since the wheel does the rolling, all you need to do is push and steer.

Questions

1. What kind of simple machine is a wheelbarrow?

_____

_____

2. How are the handles positioned in relation to the wheel?

_____

_____

3. Where should the heaviest items go in the tray?

_____

_____

4. Why should you keep the load low?

_____

_____

5. What does the wheel do so that the person only has to push and steer?

_____

_____

6. Why would a heavy load near the handles be harder to lift than one near the wheel?

_____

_____

Words to know

wheelbarrow: a small cart with one wheel and two handles
lever: a bar that turns around a point to help lift things
load: the things that are being carried
steady: firm and not shaking or wobbling
steer: to guide which way something goes

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Packing a Wheelbarrow the Smart Way

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Packing a Wheelbarrow the Smart Way

Easier · 140 words · Flesch-Kincaid grade 0.7

1. A lever.
2. Far from the wheel.
3. At the front, near the wheel.
4. A tall pile can tip over.
5. It rolls, so the person only pushes and steers.
6. The wheel carries less of the weight, so the person has to carry more.

Triangle: Packing a Wheelbarrow the Smart Way

This passage · 168 words · Flesch-Kincaid grade 2.6

1. A lever.
2. Far from the wheel.
3. Near the front, close to the wheel.
4. A tall, wobbly pile can tip over.
5. It does the rolling, so the person only pushes and steers.
6. The wheel would carry less of the weight, so the person would have to carry more.

Square: Packing a Wheelbarrow the Smart Way

Harder · 179 words · Flesch-Kincaid grade 4.8

1. A lever.
2. Far from the wheel.
3. Near the front, close to the wheel.
4. A tall, wobbly pile may topple over.
5. It does the rolling.
6. The wheel would support less of the weight, so the person would have to carry more of it.