Name: _____ Date: _____

The Secret Bolt Inside a Doorknob

Circle group

You turn a doorknob. The door opens. How? Some of the work is hidden in the door.

A little piece of metal sticks out of the door's edge. It is a latch. The latch slides into a hole in the wall frame. That keeps the door shut.

Turn the knob. A rod inside turns. The rod pulls the latch back. The door is free. You can push it.

Let go of the knob. A spring pushes the latch out. Click!

Questions

1. What is the metal piece on the door's edge called?

_____

_____

2. Where does the latch slide?

_____

_____

3. What does the rod do when you turn the knob?

_____

_____

4. What pushes the latch out again?

_____

_____

5. Why does the door stay shut?

_____

_____

Words to know

latch: a metal piece that holds a door shut
frame: the part that goes around the edge of a door
rod: a long, thin bar
spring: a coil of metal that pushes back after you press it

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: _____

The Secret Bolt Inside a Doorknob

Triangle group

You turn a doorknob and the door opens. How does it work? Part of the work is hidden inside the door.

On the edge of the door sticks out a little piece of metal. It is called a latch. The latch slides into a hole in the wall frame. That keeps the door shut.

When you turn the knob, a rod inside turns too. The rod pulls the latch back into the door. Now nothing holds the door, so you can push it open.

When you let go of the knob, a spring pushes the latch out again. Click! The door can lock itself when it shuts.

Questions

1. What is the little piece of metal on the door's edge called?

_____

_____

2. Where does the latch slide?

_____

_____

3. What happens inside the door when you turn the knob?

_____

_____

4. What pushes the latch out again?

_____

_____

5. Why does the door stay shut when nobody is holding the knob?

_____

_____

Words to know

latch: a metal piece that holds a door shut
frame: the part that goes around the edge of a door
rod: a long, thin bar
spring: a coil of metal that pushes back after you press it

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: _____

The Secret Bolt Inside a Doorknob

Square group

When you turn a doorknob, the door swings open, but you may not realize that much of the work happens out of sight, inside the door itself.

A small piece of metal called a latch sticks out of the edge of the door. The latch slides into a hole in the wall frame, and that is what keeps the door shut.

As you turn the knob, a rod inside the door turns along with it. The rod pulls the latch back into the door, so nothing holds the door in place any longer, and you can push it open.

When you let go of the knob, a spring pushes the latch out again with a click. That is why a door can lock itself whenever it is shut.

Questions

1. What is the small piece of metal on the edge of the door called?

_____

_____

2. Where does the latch slide to keep the door shut?

_____

_____

3. What happens inside the door as you turn the knob?

_____

_____

4. What pushes the latch out again when you let go?

_____

_____

5. Why does the door stay shut when nobody is holding the knob?

_____

_____

Words to know

latch: a metal piece that holds a door shut
frame: the part that goes around the edge of a door
rod: a long, thin bar
spring: a coil of metal that pushes back after you press it

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: The Secret Bolt Inside a Doorknob

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

Circle: The Secret Bolt Inside a Doorknob

Easier · 80 words · Flesch-Kincaid grade -0.5

1. A latch.
2. Into a hole in the wall frame.
3. It pulls the latch back.
4. A spring.
5. The latch sticks out into the wall frame and holds it.

Triangle: The Secret Bolt Inside a Doorknob

This passage · 107 words · Flesch-Kincaid grade 1.1

1. A latch.
2. Into a hole in the wall frame.
3. A rod turns and pulls the latch back.
4. A spring.
5. The latch sticks out into the wall frame and holds the door.

Square: The Secret Bolt Inside a Doorknob

Harder · 128 words · Flesch-Kincaid grade 5.2

1. A latch.
2. Into a hole in the wall frame.
3. A rod turns and pulls the latch back into the door.
4. A spring.
5. The latch sticks out into the wall frame and holds the door in place.