

MUSEUM DISCOVERY QUEST
TOOLS & SIMPLE MACHINES
 MDQ NO. 002

TAKE A JOURNEY THROUGH THE MUSEUM TO EXPLORE TOOLS AND SIMPLE MACHINES.

FIRST FLOOR
 CHALLENGES & CHAMPIONS EXHIBIT / HAND GALLERY



Find the man climbing Mt. Everest

OMG! ARE THESE FROM A SCIENCE FICTION OR HORROR MOVIE!?

Peer at the top of the mountain. What slippery substance is on the rockface?
 "UH OH. THIS CAN'T BE GOOD!"

Find the pointy, sharp, fang-like objects called crampons.
 On what part of the body does the mountain climber wear them?
 How do the crampons help him climb the ice?
 What kind of simple machine are the crampons?

What is a tool?
 A handheld device that aids in accomplishing a task.

What is a simple machine? A device or object that makes tough jobs easier by changing the force, direction or speed of a movement. (See the glossary on the back)



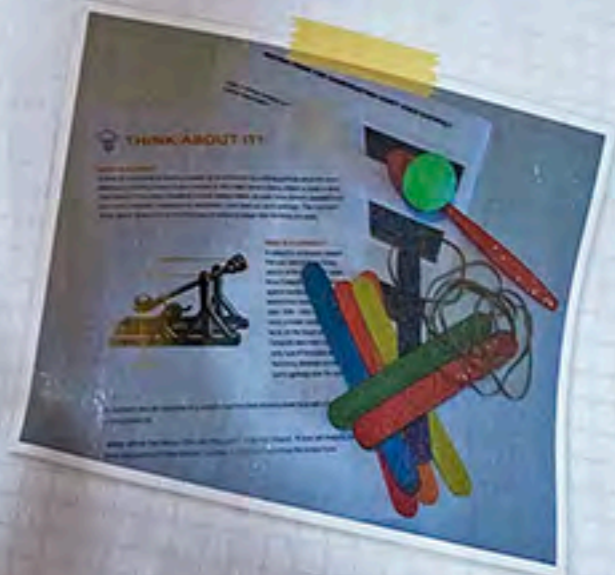
MUSEUM DISCOVERY QUEST
TOOLS & SIMPLE MACHINES
 MDQ NO. 002



TAKE-IT N' MAKE-IT PACKET:
CATAPULT

- PACKET INCLUDES:**
- >> 9 Colored Craft Sticks
 - >> 8 Rubber Bands
 - >> 1 Red Plastic Spoon
 - >> 1 Colored Ping Pong Ball
 - >> Instruction Sheet
 - >> Think About It Insert About Levers & Catapults

- YOU SUPPLY:**
- >> Nothing Needed





TOOLS & SIMPLE MACHINES

TAKE A JOURNEY THROUGH THE MUSEUM TO EXPLORE TOOLS AND SIMPLE MACHINES.

FIRST FLOOR

CHALLENGES & CHAMPIONS EXHIBIT / HAND GALLERY



Find the man climbing Mt. Everest

OMG! ARE THESE FROM A SCIENCE FICTION OR HORROR MOVIE!?



Peer at the top of the mountain.

What slippery substance is on the rockface?

"UH OH. THIS CAN'T BE GOOD!"



Find the pointy, sharp, fang-like objects called *crampons*.

On what part of the body does the mountain climber wear them?

How do the crampons help him climb the ice?

What kind of simple machine are the crampons?

What is a tool?

A handheld device that aids in accomplishing a task.

What is a simple machine?

A device or object that makes tough jobs easier by changing the force, direction or speed of a movement.

[See the glossary on the back]

FIRST FLOOR

BECOMING CLARKSVILLE EXHIBIT / HERITAGE HALL

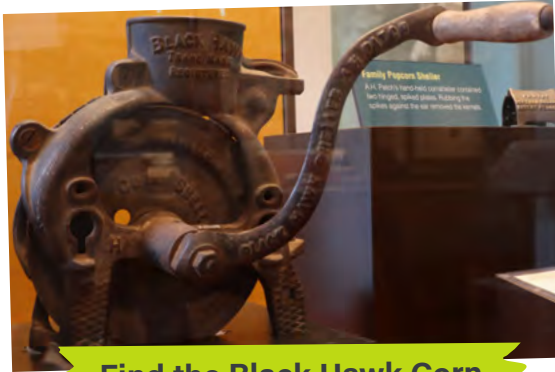
AND THE TURKEY SAID,
"YOU WANT TO USE MY
WHAT FOR A WHAT!?"



What is this pen
made from?
How is it used?



Find this quill pen, an
old-fashioned writing tool



Find the Black Hawk Corn
Sheller, designed to take
dry kernels off corncobs

HOW MUCH CORN COULD
A CORN SHUCK SHUCK,
IF A CORN SHUCK COULD
SHUCK CORN?



Investigate the front
and back of this
corn sheller.

How do you think
it works?

Identify two
different simple
machines used
in this device (Hint:
make sure you look
on both sides).



LOWER LEVEL

HUFF & PUFF
EXPRESS MODEL
TRAINS

Find the Livingston
Co. Bridge

DID YOU KNOW: YOU'RE
STRONG ENOUGH TO MAKE
A LIFE-SIZE BRIDGE LIKE
THIS MOVE--IF YOU USE A
SIMPLE MACHINE!



Look closely at the top of both towers. *What simple machine that uses a rope do you see? How do they work?*

What do they do? (Hint: Follow where the ropes go and what they're attached to)

LOWER LEVEL

TOOLS OF THE TRADE EXHIBIT / MEMORY LANE

What is one thing all these tools have in common? They get their power from (choose one):

- Electricity
- People
- Wind
- Giraffes

WHICH TOOL AM I?

The **wheel** I have, as you can see, moves the **gears**, of which there are three.

The **gears**, of course, increase the **force**, needed to crush the apples, of course!

And then there is the **giant screw**; what is it that you think I do?

You want some juice that's tasty & fresh? You need to screw me down to press!

GLOSSARY



WHEEL & AXLE: A wheel is a disk on a central point. The axle is the pin or bar on which the wheel revolves.



WEDGE: Used to split things apart, a wedge is often triangular shaped, thick on one end and tapered to a thin sharp edge on the other end.



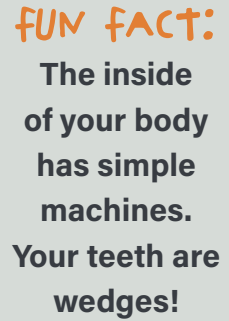
SCREW: A solid cylinder with a winding groove around it.



GEAR: Interlocking wheels with teeth on the outer rim that either increase the force OR speed of a machine.



PULLEY: A wheel with a groove in it that holds a rope in place. It is used to lift up or lower heavy objects.



FUN FACT:
The inside
of your body
has simple
machines.
Your teeth are
wedges!

