

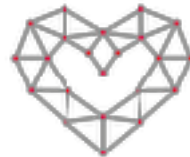
EEK!

ENGINEERING
ENGAGEMENT
IT



CELL-MET

REAL OR IMAGINED



CELL-MET

Objective:

Explore all the
creative things
engineers do

In this slide show, you will

1. Learn why engineers need to use their imaginations to do their jobs
2. Set up for the activity
3. Get instructions on completing the activity

WHY DO ENGINEERS
NEED TO USE THEIR
IMAGINATION?

Engineers use their imaginations to solve problems.

There are 2 main types of problems that engineers solve.

EEK! 

1. Engineers solve problems by **inventing** things that never existed before.

EEK! 

1. Engineers solve problems by **inventing** things that never existed before.
2. Engineers solve problems by **improving** existing inventions.

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Why do you think this requires using your imagination?

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TWO EXAMPLES

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INVENTING SOMETHING NEW

Problem: Before 1876, people mostly communicated by sending letters.

This means, it could take a LONG time to get people important information.

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INVENTING SOMETHING NEW

Solution: Alexander Graham Bell
invented the telephone!



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IMPROVING AN INVENTION

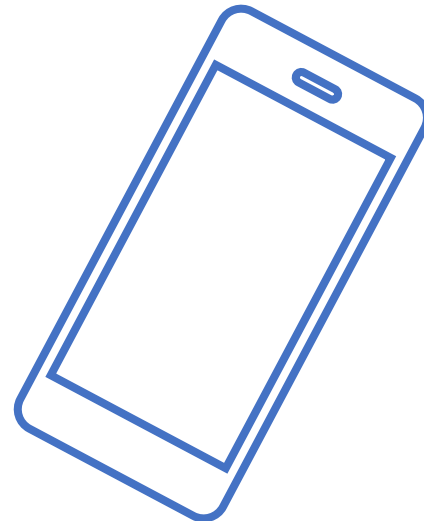
Problem: Phones improved communication, but they had to be plugged in.

If you weren't at home you would have to find a phone to use.

EEK! 

IMPROVING AN INVENTION

Solution: In 1973, Martin Cooper invented the first phone that did not need to be plugged in – a cellphone!



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To design the phones, the two inventors had to imagine how the phone would...

- Look
 - Get power
 - Make people's lives easier
 - Connect to other phones
-
- Can you think of anything else they had to consider?

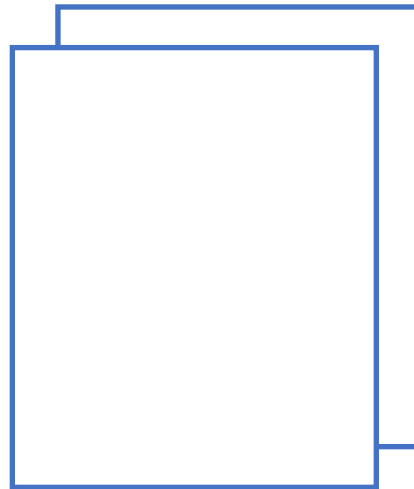
Now, let's prepare for
the activity!

EEK! 

ACTIVITY SET UP

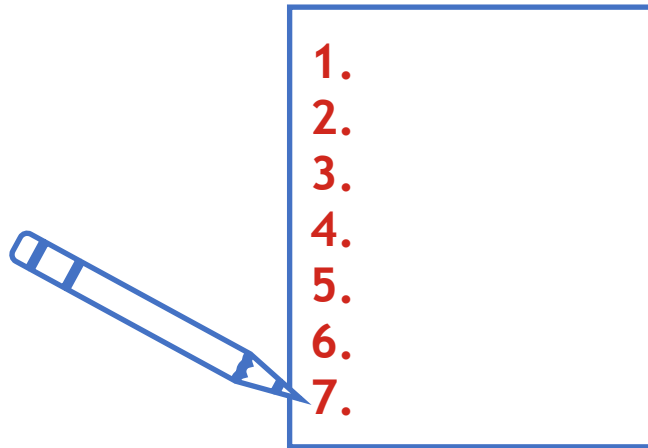
To complete this activity, you need

- 2 sheet of paper
- 1 pencil or pen
- Optional: Coloring supplies



Prepare your paper

- Number one sheet of paper from 1 to 7



LEARN THE ACTIVITY

EEK! 

There are 3 parts to this activity

1. Which inventions are real?

2. What inspired each invention?

3. Imagine and draw your own invention!

There are 3 parts to this activity

1. Which inventions are real?

Read the descriptions and guess if the items are REAL or IMAGINED. Write your answers on your numbered sheet of paper. Then, keep reading to see how you did!

2. What inspired each invention?

3. Imagine and draw your own invention!

There are 3 parts to this activity

1. Which inventions are real?

How many can you guess correctly?

2. What inspired each invention?

Read the descriptions provided and see if you can guess what inspired the invention. You don't need to write down these answers.

3. Imagine and draw your own invention!

There are 3 parts to this activity

1. Which inventions are real?

How many can you guess correctly?

2. What inspired each invention?

Could you guess any of the inspirations?

3. Imagine and draw your own invention!

Draw something that you wish existed. What does it do?

There are 3 parts to this activity

1. Which inventions are real?

How many can you guess correctly?

2. What inspired each invention?

Could you guess any of the inspirations?

3. Imagine and draw your own invention!

Does your invention solve a problem?

You can complete this activity
ALONE or **IN A GROUP**

If you complete the activity ALONE:

Follow the instructions as described

If you complete the activity IN A GROUP:

Your group should discuss and agree upon your answers for the guessing activities.

EEK! 

Ready to go?

Open the file named
"RoI Slideshow" to start!