

Little Big Idea Winner

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

- 1. Why did Lucia invent the School Stuff Checker?
- 2. Briefly describe Lucia's invention.
- 3. Explain Cohen's invention, the Biolume.
- 4. What did Josh invent?
- 5. If you could invent something, what would it be?

Activity: Class Discussion

Discuss the BTN Little Big Idea Winner story as a class. What questions were raised in the discussion? Here are some questions to guide discussion:

- What is an invention?
- Who is an inventor?
- What do they do?
- Can anyone be an inventor? Why or why not?
- What do you know about the process of inventing?
- What things might inventors have to do and think about in order to invent something?
- What scientific discoveries or inventions have impacted on your life?
- What invention could you not do without? Why?

Activity: Glossary

Students will brainstorm a list of key words that relate to the BTN Little Big Idea Winner story and inventions. Here are some words to get you started.

INVENTION	INSPIRATION	INNOVATION
PROTOTYPE	DISCOVERY	SCIENCE

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KEY LEARNING

Students will learn more about inventions created by young people and design their own invention.

CURRICULUM

Science - Years 5 & 6

Scientific knowledge is used to solve problems and inform personal and community decisions.

With guidance, pose clarifying questions and make predictions about scientific investigations.

Reflect on and suggest improvements to scientific investigations.

Science - Year 7

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations.

People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity.

Activity: Young Inventors

Students will explore in more detail the winning inventions of the Little Big Idea competition.

The School Stuff checker

The BTN story explained Lucia's invention. Watch the story again and respond to the following:

- Briefly describe the invention.
- What inspired Lucia's invention?
- How does it work?
- What materials is it made from?
- What problem does it solve?
- What is unique about the design?
- What questions do you have about the invention?



Biolume Tree

Watch Cohen's <u>submission video</u> about his invention and respond to the following:

- Briefly describe the invention.
- What inspired Cohen's invention?
- How does it work?
- What materials is it made from?
- What problem does it solve?
- What is unique about the design?
- What questions do you have about the invention?



YouView

Watch Josh's <u>submission video</u> about his invention and respond to the following:

- Briefly describe the invention.
- What inspired Josh's invention?
- How does it work?
- What materials is it made from?
- What problem does it solve?
- What is unique about the design?
- What questions do you have about the invention?



Check out all the 2021 finalists here.

Activity: Australian Inventions

Students will research an Australian invention using the following questions to help guide their research:

- Why did the object first come about? Was it intentional or accidental?
- What problem or issue does the invention overcome or solve?
- Who was the inventor?
- When was the object invented?
- How does the invention work?
- How does the invention help people?
- How has it changed or affected people's lives?
- What if the object was never invented?



Activity: Design your own invention

In small groups, students can design their own invention or make a modification to an invention (to improve the design or function of a product). Ask students to respond to the following:

- What are some real-world problems that need to be solved (think of some small and some big)?
 They could be problems that you have seen or experienced.
- Choose one real-world problem from your list. What could you invent to help solve this problem?
- How does your invention work?
- What materials is it made from?
- What is unique about the design?
- Draw a picture and name your invention.
- What inspired you to create your invention?
- Prepare for and present your invention to the class or wider community.

Some inventions by kids...



Check out these BTN stories featuring kids talking about their inventions which help solve real-world problems.



Bionic Arm Builder



Young STEM Inventor

Useful Websites

- <u>2021 Winners</u> Little Big Idea Competition
- Rein Angel Inventor BTN
- Aussie Inventions BTN