

Communication and Technology

Themed activities to develop and enhance creative thinking skills. Tasks are ideally suited to a library or classroom Learning Center.

Activities to suit grades 5-8

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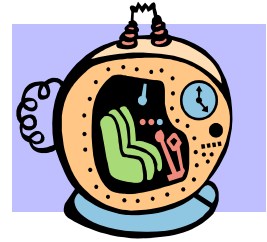
Task 9: Time Travel Technology

Materials: Library / reference books, Internet access, paper or word processor, pens.

Setting the Scene: You are from the future, from the year 2050 to be precise. You have been sent back in time using time transport technology that was developed in 2035.

Task: Answer the following questions. You may draw illustrations to help explain your answers. You may need a page to answer each question.

- What communication systems exist in the year 2050?
- What communication systems of earlier times are still in place? For example, are websites and e-mail still used?
- How did you arrive back in this time frame? How will you return?
- Why are you here?



For more information on time travel be sure to fly over to this website:

www.pbs.org/wgbh/nova/time/

Related Outcome: a) Students will explore the possibility of time travel, and use multimedia research tools to gather more information; b) Students will compare two periods of communication technology.

Creative Thinking Skills: Brainstorming, Flexibility, Elaboration, Curiosity, Creativity.

Subject Areas: Science, Technology, Social Studies, English - Creative Writing

Task 10: What If ...?

Materials: Library / reference book, paper, pens.

Task: You have two choices:

A) Write 1-2 paragraphs in response to EACH of the following scenarios. Investigate the possible outcomes and decide what you think might actually happen. Be creative and discuss your writing with a partner.

B) Choose ONE scenario below and explore it in great detail. Analyze ALL possibilities and give reasons for your choice.

- ◆ What if prehistoric man (cave man) invented radio communication?
- ◆ What if there were no artificial satellites in space?
- ◆ What if we communicated with another life form in another galaxy and they spoke English?
- ◆ What if a computer virus wiped out the WWW completely?
- ◆ What if everybody had a computer chip planted in their wrists that let people know when other people anywhere in the world wanted to contact them?
(Instead of a cellular phone beeping with an SMS message, your wrist would trigger an electric pulse.)



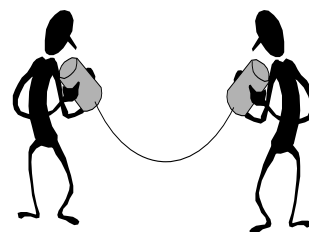
Related Outcome: Students will look at a problem from a different perspective and will analyze how some situations could have a positive outcome.

Creative Thinking Skills: Brainstorming, Problem Reversal, Elaboration, Fluency, Flexibility, Imagination.

Subject Areas: English - Writing, Technology, Social Studies, Science - Earth and Beyond.

Task 11: Design a Communication Device

Materials: Library / reference books, Internet access (optional), library books, encyclopedias, large sheets of butcher's paper or A3 paper, pen, colored markers. Access to a range of science equipment – torches, colored streamers, tin cans, string, tools, electrical tape and so on.



Task 1: Design and test a way in which you can communicate with a partner who is 200 meters away from you. You are not allowed to use cellular phones, computers or megaphones or other people as “messengers”.

You must:

- Demonstrate your communication method with another person
- Explain your how your system works. It may be along the lines of semaphore, or you may like to devise a primitive walkie talkie or radio device, or you may like to invent some form of sign language.

Task 2: Test your device and then discuss how you could improve on your design.

Related Outcomes: Students will design, make and appraise a communication device using simple everyday items found in the science store room.

Creative Thinking Skills: Applied Imagination, Curiosity, Elaboration.

Subject Areas: Science, Technology, English - Speaking & Listening.

Task 12: Radio Waves

Materials: Library / reference books, paper, pen, Internet access.

Task: Design a poster that celebrates the wonder of radio.

You should focus on at least two of the following:

- ◆ The “Golden Age of Radio”;
- ◆ The invention of the radio;
- ◆ Guglielmo Marconi’s work with radio communication;
- ◆ A world without radio;
- ◆ Great moments in radio;
- ◆ Radio programs;
- ◆ Radio technology;
- ◆ Radio stars.



EXTRA: Want to know exactly how a simple radio can be made? Check out these websites:

1. www.scitoys.com/scitoys/scitoys/radio/radio.html#crystal
2. electronics.howstuffworks.com/radio1.htm

Related Outcome: Students will research the invention and development of the radio.

Creative Thinking Skills: Curiosity, Imagination, Logical Thinking, Elaboration,

Subject Areas: English - Writing, Social Studies - Time, Continuity & Change, Technology.

Task 13: Aesop's Fables for the 21st Century

Materials: Library / reference books, Internet access, paper, pen.

Setting the Scene: Aesop was a Greek slave who lived around the time of 500 BC. He wrote a collection of stories that were short yet inspiring. Each of the stories or *fables* as they are more commonly known, provided a moral and offered useful advice. The stories were all concerned with animals who were used to represent humans and highlight the virtues and failings of human characters. Many of Aesop's fables have provided us with popular phrases. See how many you recognize as you read some of them at the website listed below.



Task: Using the website below, read some of the traditional fables as told by Aesop in the ancient times. Choose three fables and have a go at rewriting them using the language of the 21st Century.

www.umass.edu/aesop/contents.html

Challenge: Write an entire fable in the language of SMS. Look B4 U learn!

Related Outcome: Students will understand that people modify language over time to suit their needs.

Creative Thinking Skills: Word Play, Originality, Flexibility

Subject Areas: English - Writing, Speaking, Language Strategies.

Task 14: Quotations, Quotations

Materials: Library / reference books, Internet access, paper, pen.

Task: Take a close look at the quotes below, noting the time (year) at which they were quoted.



Quote One: "I think there is a world market for maybe five computers."

— Thomas Watson, Chairman of IBM, 1943.

Quote Two: "The 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us."

— Western Union internal memo, 1876.

Problem Reversal: Imagine a world with no telephones and only five computers. Explain how this might have a positive outcome for the world. Give reasons for your ideas and use examples where possible. You can present your ideas using any format you like. You may like to read out your ideas to the class or you could create a wall chart with glimpses of how the world turned out.

Related Outcome: Students will understand that people's ideas and perceptions about new inventions can change over time.

Creative Thinking Skills: Problem Reversal, Elaboration, Originality, Imagination.

Subject Areas: English - Writing, Social Studies - Time, Continuity & Change, Technology, Science.

Student Self-Assessment

☐ Complete this sheet at the conclusion after completing each of the task cards.

Name: Task Card:

Explain in your own words what the task was asking: _____

What strategies did you use to complete the task? _____

How did you share your learning experience with the class? _____

The aspect you enjoyed most about this activity was (Give reasons.) _____

The part you liked least about this task was: _____

How could you have improved your learning experience? _____

Think About ...

Read the following statements and then colour the appropriate circle.



	Strongly agree	Agree	Disagree	Strongly Disagree
I enjoyed this task.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I learnt new things during this task.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy sharing my work with the class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel my work could be improved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This task gave me something to think about.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was unsure of what this task required.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to research this task further.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was satisfied with my end result.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>