

TECHNOLOGY

YRS 1-4

EXPLORING INVENTIONS

CURRICULUM STRANDS

Technology	Technology and Society
English	Oral Language • Listening and Speaking Written Language

LEARNING INTENTIONS

- Share ideas about the ways in which familiar technology and inventions affect peoples lives
- Identify, clarify and question meanings and vocabulary linked to technology in oral and written language
- Converse about personal experiences with inventions and read aloud from own written labels and texts

SKILLS USED AND DEVELOPED

- Using a range of enquiry techniques to obtain information using materials, tools and equipment safely
- Construction and labelling of demonstration pictures or constructions
- Working in co-operative ways in a group

SUCCESS CRITERIA

- Collect and display data on inventions in the classroom, school office and at home.
- Find out about famous inventors and their inventions
- Interview parents and older people and gather information about inventions they have experienced and the words to name them - Homework -who can get the longest list?
- List any new English words created for new inventions - find out the new Maori words which have been created also.
- Are there many names from around the world for "Motor Car"?
- How many can you find?
- In groups, plan and construct your own "invention" which has never been seen before. Invent a label for your invention and write a paragraph to read to the class about how your new piece of technology works.
- Tell about the safe use of tools you used.

- Make a list of these inventions. Explain to the children that all the things that we use in the classroom and the school were invented by someone at some time. Some are new and some are very old.

ACTIVITY TWO

DEVELOPING THE UNIT

- Visit the school administration area to look for inventions. Ask the office person to demonstrate some or all of the following inventions, that are used daily in the office.
- Before the visit, ask the children to try and guess what exciting inventions they will find in the administration area. What are they called? What do they do? How do they help the office person? Make a list on pieces of A4 sized paper, eg
 - photocopier
 - fax machine
 - answerphone
 - telephone
 - computer
 - dictaphone
 - laser printer,
 - floppy discs
 - intercom
 - microphone
 - mobile phone.....
- Before each invention is demonstrated, have the children try and identify the piece of equipment and tell you what they think it does.
- If possible, give several children a chance to work each invention. Photocopy off the invention list.
- Now visit the storeroom and discover more inventions such as, tape recorders, overhead projectors, television, video cassette recorders, junction box, electronic keyboards.....

INVENTION DISPLAY

- Ask the children to tell about their favourite invention that they saw.
- Have each child paint a picture of their favourite invention.
- Make captions or short statements for each invention giving its name and what it does.
- Discuss how the invention makes things easier for the school. How were things done before they were invented? Have the children complete some personal writing on how the inventions help us.
- Make the writing and pictures into a Big Book.
- Read and share the book having each child if possible read explain his/her favourite invention.

ACTIVITY THREE

NEW WORDS FOR THE OFFICE & CLASSROOM

- Develop the idea with the class that before these modern inventions were developed, there were no words for them and the words had to be made up for them.
- Have them ask their parents, grandparents and older friends what new invention words they know that were not around many years

ACTIVITY ONE

GETTING STARTED

- Talk about inventions. What is an invention? What is an inventor? Ask the children if they know of any modern invention that was not around when their parents or grandparents were at school.
 - eg
 - computer, television, compact disc player, overhead projector, ball point pen

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ago. These words were invented, just like the inventions themselves. Share these ideas with the class.

- Explain to the children that the Maori language too is inventing new words to add to the Maori language. These are new and exciting words and they are going to help other classes and teachers in the school learn these words. To do this, the children are going to draw and paint pictures and staple on a caption of the Maori name.
- Have each child choose one of the following words of familiar classroom and school equipment developed by the Maori Language Commission for their picture.

<i>ball point pen/penepura,</i>	<i>computer/rorohiko,</i>
<i>fax machine/waea whakaahua</i>	<i>felt pen/pene whitau</i>
<i>overhead projector/rauata</i>	<i>photocopier/purere whakaahua</i>
<i>telephone/waea</i>	<i>tape recorder/pure hopu tangi</i>
<i>video cassette recorder/purer ataata</i>	<i>television/pouaka whakaata</i>
<i>stapler/whakatepara</i>	<i>microphone/uruoro</i>
<i>microwave/ngaruiti</i>	<i>guitar(acoustic)kita noa</i>
<i>guillotine/poropepa</i>	<i>drawing pin/pine whakairi</i>

- Add Maori name caption to the finished pictures and have a display in the school corridor, foyer or hall.
- Invite other classes to visit the display. As well as the picture, if possible, have the original article.
- Give each child the task of explaining their picture and teaching others the correctly pronounced Maori word. Ask good speakers of Maori for help if necessary.

ACTIVITY FOUR

INVENTING AN INVENTION

- Have groups or individuals become inventors and draw, paint or better still, construct an invention that has not yet been invented.
- Have them explain how their invention works and what their invention does.
- Now have the children invent a new word/s name for their invention, write a label and attach it to the invention. Each group now has the task of teaching this new name to others.
- Display your new inventions and invite other classes to the display.
- Have each student explain what their invention does, how it does it and why it was invented.

ASSESSMENT CRITERIA

- Understanding of how new inventions and technology affect and improve our way of life - when discussing and explaining the uses of some of the inventions in the display.
- Understanding the link between new inventions and technology and a developing vocabulary - when examining the words created in the English and Maori Languages for common objects and writing and reading labels.
- Ability to converse about our experiences with inventions - when demonstrating and reading aloud labels and texts about the group's invention.