

Instruction Sheet for Technology Worksheet Level 3 (Ages 10-12)

Points to note for Museum Guides/Teachers:

Aim: This worksheet aims to get students thinking about the use of technology in the construction of the Wellington Cable Car and how technology has changed over time.

House Keeping: Ideally teachers and students will have had the worksheet sent to them before they visit.

Once the group has arrived inside the Museum

Sit the group down if possible, before talking to them.

Keep the welcome and introduction to 5-10 minutes at a maximum, including introducing the worksheet if this hasn't been done at school.

Museum Guide/Teacher Introduction: Tell the students life was different 100 years ago at the time when the Cable Car was built. Focus in on the technology available at that time. Ask how the technology then would differ from the technology available today for constructing a cable car.

Use the information below to tell students about the construction.

The challenging task of turning Fulton's plans into a working cable tramway began in 1899. For two and a half years, gangs of men, including prisoners from the Terrace Gaol, laboured night and day wielding picks, shovels and wheelbarrows to construct three tunnels and four viaducts and lay the required 39 chains of cable track. The work, supervised by contractor Maurice O'Connor, was noisy, gruelling and all the more difficult due to the steep incline.

In December 1901, a case for compensation was laid against the company by a Mrs. Jack, who owned a property above one of the tunnels under construction. Nightly blasting operations had caused cracks in the walls of her house, and left its occupants "greatly disturbed." In June, a concrete retaining wall had collapsed causing substantial subsidence on the same property. Yet despite this and other setbacks, including several slips in the tunnels and the late arrival of the cable and rails from England, by early 1902 the cable car system was complete and ready to convey its first passengers up the hill to Kelburne.

Explain to the students that they are going to complete their own worksheet.

Tell them it will involve:

- Collecting information inside and outside the Museum
- Reading the information on the walls
- Looking at photographs and diagrams

Hand out the worksheet and then go through it with the group if they have not seen it before. Ask if they have any questions.

Send them off to complete the task moving around the group to keep them focused.

Once the time allotted is up bring the group back together and ask for answers.

Welcome to The Wellington Cable Car Museum

Find the answers on the way up in the Cable Car and inside the Museum at the top.

Technology Level 3 (Ages 10-12)
Nature of Technology and Technological Knowledge

1. Fill in the gaps on this ticket.
Use the information board located between the carriages.
(top floor).

Date of Travel	Arriving At	Time of Trip:
Cost	Departing From	Length of trip: 800 metres

2. Circle the things you saw on the way up the hill in the Cable Car today.
Tick the things you would have seen on the same ride 100 years ago.



3. Name the tools used to build the Cable Car track (top floor).

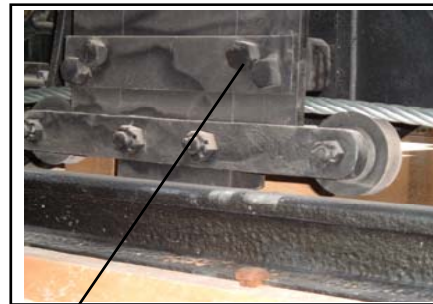


Choose from: Pick, Steam roller, Spade, Wheel barrow, Bull dozer

4. Spot 3 differences between the two Cable Cars (top floor)



5. Find this. What is it?(ground floor)



(Clue: Look up)

The _____ of steel.

(ground floor)

List 3 differences between the old and new Cable Car system.

6. There are 10 words hidden in the wordfind see if you can find them

A	J	K	D	I	G	G	E	R	V	R	C	W
R	E	S	T	O	R	I	N	G	A	C	A	O
R	T	I	C	K	E	T	K	E	K	K	B	R
H	L	H	B	H	H	R	G	H	V	C	L	R
C	A	Z	L	E	C	G	R	T	T	A	E	A
D	H	D	Q	D	N	C	D	D	D	R	C	B
W	E	L	L	I	N	G	T	O	N	T	A	L
A	S	D	D	F	L	K	J	A	S	B	R	E
L	L	N	P	I	C	K	L	L	W	L	L	E
M	I	O	Q	S	C	E	G	H	A	K	M	H
W	E	L	L	V	D	O	N	E	J	E	O	W

PICK	DIGGER	JAWS
WHEELBARROW	CABLE CAR	TICKET
WINDING GEAR	TRACK	RESTORING
WELLINGTON		

Finished? Ask your teacher for the Cable Car model and fold it together

Welcome to The Wellington Cable Car Museum

Find the answers on the way up in the Cable Car and inside the Museum at the top.

Technology Level 2 (Ages 10-12)

Nature of Technology and Technological Knowledge

ANSWER SHEET

1. Fill in the gaps on this ticket.
Use the information board between the old Cable Car (top floor).

Date of Travel	Get students to write in the day of travel	Arriving At	Fill in terminal arrived at	Time of Trip:	Three and a half minutes
Cost	\$1.00	Departing From	Fill in place of departure	Length of trip:	800 metres

2. Circle the things you saw on the way up the hill in the Cable Car today.
Tick the things you would have seen on the same ride 100 years ago.



3. Name the tools used to build the Cable Car track (top floor).



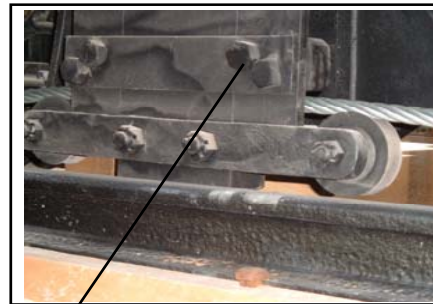
Choose from: Pick, Steam roller, Spade, Wheel barrow, Bull dozer

4. Spot 3 differences between the two Cable Cars (top floor)



- * The old Cable Car has two carriages the new one has one.
- * The old Cable Car has advertising all over it the new one doesn't.
- * The old Cable Car has outside seats that are on an angle and the new one doesn't

5. Find this. What is it?(ground floor)



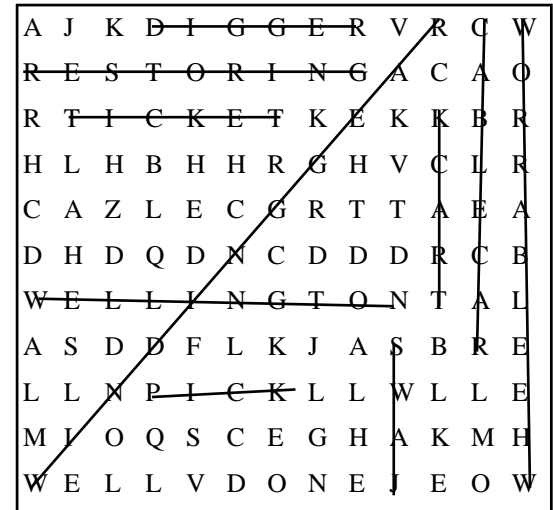
(Clue: Look up)

The **JAWS** of steel.

(ground floor)
List 3 differences between the old and new Cable Car system.

- * Old system ran on steam
- * More pollution with smoke from old system
- * A windmill helped drive the old system

6. There are 10 words hidden in the wordfind see if you can find them



- | | | |
|--------------|-----------|-----------|
| PICK | DIGGER | JAWS |
| WHEELBARROW | CABLE CAR | TICKET |
| WINDING GEAR | TRACK | RESTORING |
| WELLINGTON | | |

Finished? Ask your teacher for the Cable Car model and fold it together