

INVENTIONS WORKSHEET

1. **Use the link to do the quiz:**
<https://forms.gle/rUxK1zh3n425ycrt8>

2. **Match the inventions with the inventors:**

telephone	Alexander Fleming
penicillin	Thomas Edison
electric lightbulb	Karl von Drais
bicycle	Alexander Graham Bell
automobile assembly line	Martin Cooper
mobile phone	Henry Ford

3. **Create two groups. Group 'A' read about the invention of the bicycle. Group 'B' fill in the chart of the 'telephone'.**

bike

<https://artsandculture.google.com/incognito/story/the-invention-of-the-bicycle/mwXRBYATtgPOLg>

inventor	the invention, modification	the name of the invention	date
Karl Drais	----	'running machine'	1817
Louis Joseph Dineur	----		----
		walking vehicle (with a hand-powered mechanism)	
	differentiated the two wheels	----	1843
Jules Sourisseau		----	
Benjamin Geslin	tension-mounted metal spokes and axles	----	
Louis Alexandre Blar Francois Ernest Garin	recumbent bike	----	
	2 gears	bicycle	----
	tire	----	
	independent tires	----	1869

Joseph Marié	electric bike		
Emile Viarengo de Forville	bikes for women	----	
	side-saddle bike	----	
Peugot	Peugeot speed bike	----	
----	endless chain – a derailleur	----	

mobile

<https://www.sciencemuseum.org.uk/objects-and-stories/telephone-and-how-it-changed-us>

inventor	the invention, modernization	the name of the invention	year
	telegraphy	----	1870's
Elisa Gray? A. G. Bell?		----	
Strowger	telephone switchboard system	----	----
		'girl-less telephone'	----
----	the first automatic telephone exchange in the UK	----	
Alec Reeves	digital exchange system	----	
	the 'Samaritarians'	----	
----	MAN 9000	a number for suicidal people – the first helpline	
Bell Labs in the USA	cellular phone network	----	1970's
Martin Cooper		----	----
Motorola Company	----	DynaTAC	

	the first development of ARM - microprocessor	----	1980's
----	first base station	----	
----	a common standard - GSM	----	
----	3 G		
----	4 G		
----	5 G	----	2019

4. Prepare to give a 3-4-minute talk about the invention.

5. Use the correct tense, voice and the form of the verb:

Bicycles

A German baron _____ (name) Karl von Drais _____ (make) the first major development when he _____ (create) a steerable, two-wheeled contraption in 1817.

This early version _____ (continue to improve) upon across Europe.

Pierre Michaux and Ernest Michaux _____ (develop) prototypes with pedals _____ (attach) to the front wheel. These were the first machines to be called "bicycles," but they _____ (know) as "boneshakers" too for their rough ride.

The design of the present-day bicycle _____ (remain) much the same since John Kemp Starley _____ (design) the Rover Safety Bicycle, the first embodiment of the modern vehicle.

The early safety bicycles _____ (have) solid rubber tires. In 1888 the pneumatic tire _____ (introduce) by John Boyd Dunlop, a Scottish veteranian _____ (live) in Belfast. These _____ (provide) a more comfortable ride with greatly _____ (reduce) _____ (roll) resistance.

source: <https://artsandculture.google.com/incognito/story/the-invention-of-the-bicycle/mwXRBYATtgPOLg>

6. Use the correct forms of the words:

Mobile phones

The innovation of the cell phone began in 1900 when an _____ (invent) named Reginald Fessenden created the first human voice _____ (transmit) using radio waves. In 1947, Lars Magnus invented car phones and _____ (engine) William Rae Young worked on radio towers for telephone companies. They all started to _____ (competition).

American _____ (engine) Martin Cooper was put in charge of a project to invent the cell phone, and he believed that it should be portable, not _____ (plug) into a car. Cooper invented the first handheld _____ (wire) cell phone in 1973, which allowed people to talk for only 35 minutes before the battery ran out. In 1983, they made their _____ (invent) available to the public at a cost of \$3,995, and it became a huge _____ (succeed). However, as time went on, companies began building wireless phones that were _____ (small), lighter, and had better digital service. This made _____ (person) cell phones more affordable and led to the cell phone revolution in the 90s. In 1994, IBM's Simon was released as the first smartphone with a touchscreen and apps. Ever since then, technology keeps _____ (get) better.

source: <https://www.sciencemuseum.org.uk/objects-and-stories/telephone-and-how-it-changed-us>

7. Create conditional sentences using the words given:

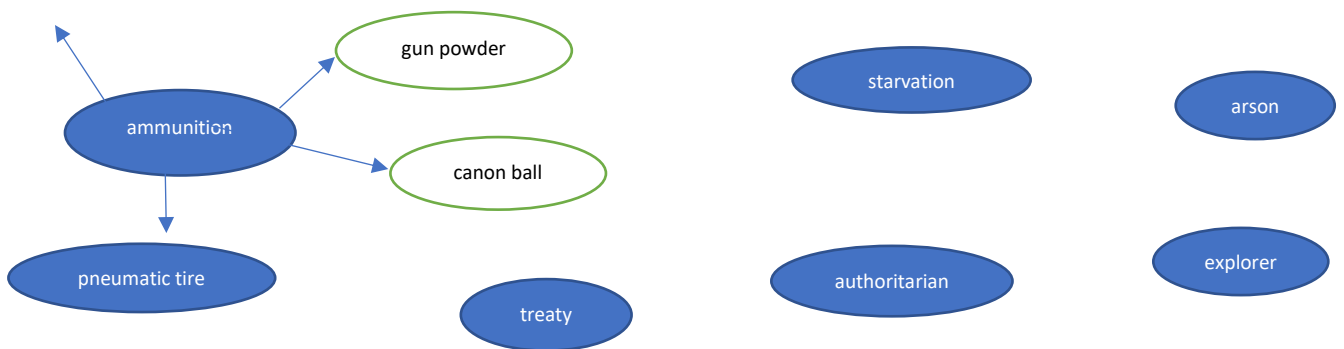
1. If early bikes _____ (not have) rough ride, they _____ (not be called) 'boneshakers'.
2. If John Kemp Starley _____ (not design) the Rover Safety Bicycle, we _____ (have) the modern version of bikes now.
3. We _____ (not be able to have) smooth rides now if in 1888 the pneumatic tire _____ (introduce) by John Boyd Dunlop.
4. If the people in Congo _____ (not harvest) so much rubber, bicycles _____ (not become) so popular.
5. If early mobiles _____ (not be) so expensive, poorer people _____ (afford) them.
6. Fewer people in Congo _____ (die) in mines if big companies _____ (find) a solution to replacing coltan and _____ (improve) the living and working conditions there.
7. If Leopold _____ (not be) so brutal, people in Congo _____ (have) a better life now.
8. It _____ (be) better for everyone if Belgium _____ (apologise).

8. Match the words with their meanings:

acquire	a thin branch of a tree
twig	an elastic substance

noble	beauty
rubber	a formal, serious promise
scramble	buy or obtain
majesty	become stronger and more certain
pledge	good, honest, moral
consolidate	move quickly

9. Find more words connected to the ones in the bubbles:



10. Watch a video about Leopold II and his brutality. What is the connection between Leopold and bicycles?

<https://www.youtube.com/watch?v=MU4vua2kNQY&t=14s>

a, What do these numbers refer to?

- 110
- 4
- 90%
- 450
- 80
- 1890
- 50 million
- 1960

b, What do these names refer to?

Lontulu

Henry Morton Stanley

John Boyd Dunlop

George Washington Williams

Roger Casement

Patrice Lumumba

11. Link to the vocabulary practice on Quizlet:

<https://quizlet.com/906700669/leopold-ii-rubber-vines-flash-cards/?i=1b84td&x=1jqt>

12. Watch a video about COLTAN, the mineral we use in some of our gadgets. What is the connection between cobalt and your mobile phone?

<https://www.youtube.com/watch?v=AA6BnitgdP8&t=5s>

a, Match the following words to make meaningful expressions:

in dangerous	line
end up	site
assembly	conditions
digital	conditions
mine	revolution
appalling	of
apologise	mine
proud	in smartphones
artisanal	for
double A	as much
relic	to
when it comes to	battery
3 times	electric cars
delight	of another age
deeply committed	in

b, Tell about cobalt and the mines in Congo using the expressions.

13. Watch a video about a vehicle invented by the people living in Congo:

<https://www.youtube.com/watch?v=OGVpl9NXTbU&t=19s>

1. What's its name?

2. What is it good for?
3. What is it made of?
4. What are the special features?
5. What does it mean when you have a vehicle like this?

14. <https://quizlet.com/906714247/coltan-mines-flash-cards/?i=1b84td&x=1jqt>