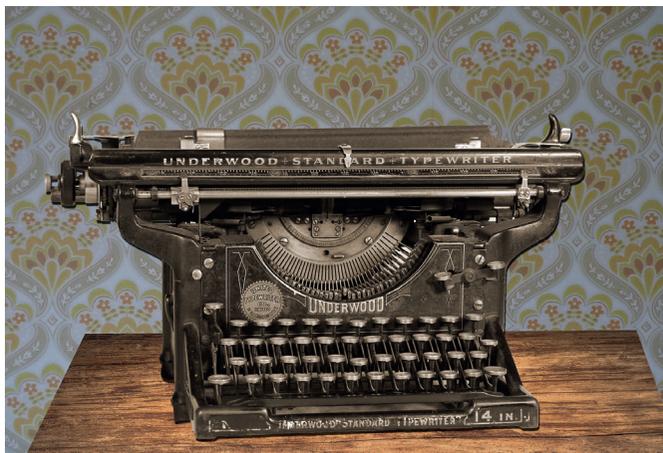


## Think



- What is this invention?
- What would you use it for?
- What would you use instead of this in the 21st century?
- Can you think of any other Victorian inventions?



## Discuss



There were many inventions in the mid to late 19<sup>th</sup> century that revolutionised people's lives and are still in use today. If you were to invent something, what would it be? How could you make people's lives easier or make something more efficient? Would it still be used in the year 2100?

## Respond



Write an advert for a Victorian invention. Why should your reader buy this invention? What are the selling points? Use your powers of persuasion.

## Solve



Professor Robinson has invented an automatic shoelace-tier. He is putting his first 200 into production. His materials cost £400 for the metal, £90 for the electrics and £310 for the packaging. If he sells them for £16 each, how many will he need to sell before he starts making a profit?

Challenge: If Raymond wants to sell each one with a 20% mark up on cost price, how much will he sell them for?

## Discover



**Fact:** The QWERTY keyboard on a typewriter was designed in 1873 to put common letter pairs far apart to reduce the chance of keys jamming and raise typing speed. The same layout is used on computer keyboards today.

**Question:** Using one row of a keyboard at a time, how many words from the English language can you make? Make a list of the ones you find and set your classmates a challenge to find more.

## Reimagine



Take inspiration from Salvador Dali's **Lobster Phone**, which parodies one of the great Victorian inventions. How can you create your own surrealist artwork? Which invention will you use?

# Inventions Answers

**If he sells them for £16 each, how many will he need to sell before he starts making a profit?**

First, children will need to calculate how much he spends in total:

$$£400 + £90 + £310 = £800$$

Next, they will need to work out how many lots of £16 are in £800:

$$£800 \div £16 = 50$$

He will need to sell 50 machines before he starts making a profit.

**If Raymond wants to sell each one with a 20% mark up on cost price, how much will he sell them for?**

He can make 200 for £800:

$$800 \div 200 = 4$$

Each machine costs £4 to make.

$$20\% \text{ of } £4 = £0.80 = 80\text{p}$$

Therefore he would sell them for £4.80.