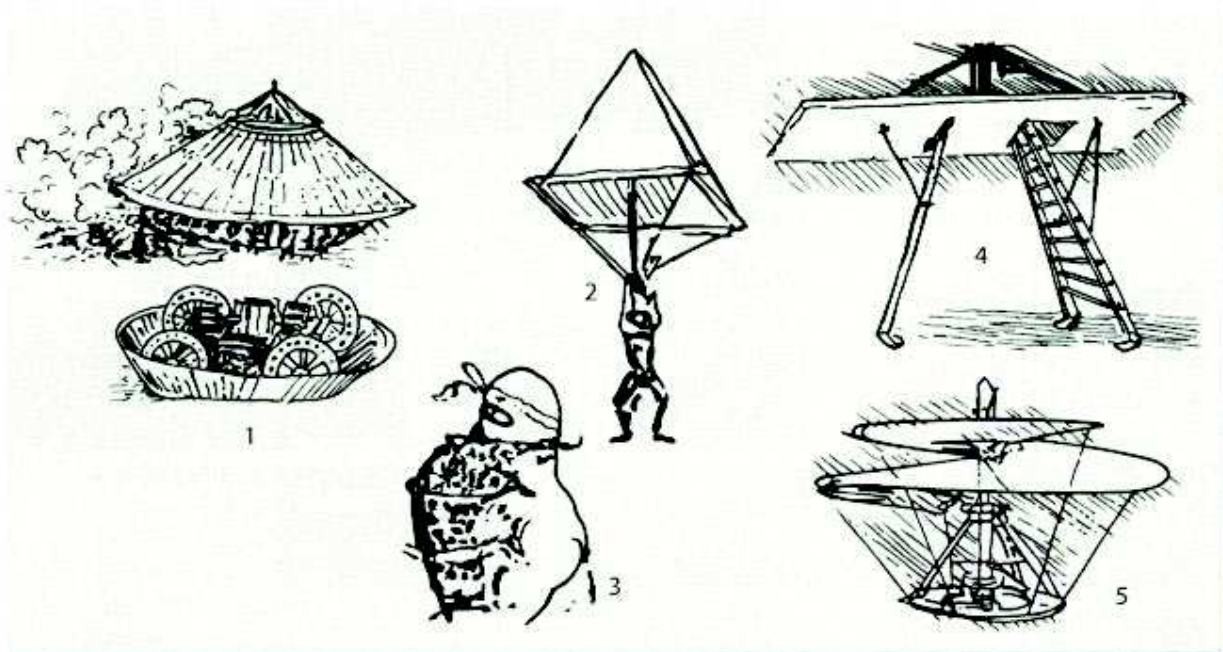


19

It's progress

Inventions

- 1 Leonardo da Vinci invented these things. What are they? Do they remind you of any modern inventions?



- 2 Read this text. Which sketch does it refer to specifically?

Sketches of these inventions were drawn in the fifteenth century by Leonardo da Vinci and although his sketch books contains many inventions, very few were built in his lifetime. He was interested in flying and he drew a lot of different flying machines, including this one with a rotating airscrew. It was powered by a wound-up spring and it works in a similar way to a modern helicopter. But the world's first helicopter wasn't built until many centuries later. The first helicopter that could carry a person was designed and flown by Paul Cornu in 1907.

Past passive

We form the past passive with *was* or *were* and the past participle.

These sketches were drawn in the fifteenth century.
The first helicopter wasn't built until centuries later.

We can use *by* to say what or who performed an action:

It was powered by a wound-up spring.
It was designed by Paul Cornu.

But often *by* is not necessary.
The first helicopter was flown in 1907.
Few inventions were built.

- 3 Complete these texts about the other sketches in 1. Use *was* or *were* and the correct form of the verb in brackets. Which sketch does each text refer to?

- 1 The world's first successful parachute jump was made (make) from the top of a tower in France in 1783. But a device that looks similar to a modern skydiving parachute (draw) by Leonardo back in 1485.
- 2 Leonardo understood a lot about flight. For example, he understood that if landing gear (not fold up), it could slow down a plane. So he designed retractable landing gear for a plane that didn't exist. The first aeroplane with retractable landing gear (build) in 1933.
- 3 Several diving suits (design) by Leonardo, but one was special because the divers (not connect) to the surface of the water by tubes. They could swim freely and breathe the air in the suit. And in 1943, the world's first AquaLung® (develop) by Emile Gagnon and the film director Jacques-Yves Cousteau. It looked very similar.
- 4 Leonardo's military inventions included one for an armoured vehicle. It had wheels that (turn) by four soldiers who sat inside and rotated cranks. The first time tanks (use) was in 1917 in Cambrai, France, during World War I.

- 4 Work with a partner.

- 1 Where was the world's first successful parachute jump made?
- 2 What was built in 1933?
- 3 Who developed the AquaLung®?
- 4 When were tanks first used?

Passive questions

The AquaLung® was developed by Cousteau.

What was developed?

Who developed the AquaLung®?

It was developed in France in 1943.

Where was it developed?

When was it developed?

- 5 Ask passive questions about these inventions.

- 1 The video cassette recorder was invented by the Sony Corporation.
- 2 It was invented in Japan in 1969.
- 3 The world's first parking meters were installed in Oklahoma City in 1935.
- 4 The meters weren't popular. Some were destroyed by the town's citizens.

- 6 Work with a partner.

A – look at the information below.

B – look at file 3 on page 102.

A

- 1 Read the information on some more inventions. Can you guess any of the missing information?
- 2 Ask your partner questions and complete the missing information.

Example

When was the telephone invented?

1 The telephone was invented by Alexander Graham Bell in (when?)

2 The ballpoint pen was invented by Ladislo Biro in 1938.

3 (what?) was invented by the Aztecs in Central America over fifteen hundred years ago.

4 Fibre optics were invented in India in 1955.

5 Jeans were invented by (who?) in 1873.

6 The first successful aeroplane* flight was made by the Wright Brothers in 1903.

7 Paper was invented (where?) around 105.

8 Teabags were invented by Thomas Sullivan in 1904.

aeroplane BrE – airplane AmE

Progress updates




1 What have you done so far today? Have you:

- 1 done any work?
- 2 spoken to anyone on the phone?
- 3 sent any emails?
- 4 had anything to eat?

Is there anything you haven't had time to do yet?



2 Listen to a conversation about three repair jobs. What are the jobs? Have they been done or not? Make notes in the chart.

1		
2		
3		

3 Listen again and complete the sentences.

- 1 you the drilling machine yet?
- 2 There a loose connection. I it and it's fine now.
- 3 I need a new part. I it yesterday and it should be here tomorrow.
- 4 And your wife me this morning.
- 5 She wants me to look at it. I time today, but I'll call by tomorrow.

Present Perfect and Past Simple

We use the Present Perfect to talk about recent actions.

I've repaired the machine.

Have you fixed it?

The time is indefinite. We mean 'some time up to now'.

I haven't had time today (at any time today, up to now).

We use the Past Simple to talk about actions that happened at a definite time.

I ordered the part yesterday.

Your wife called me this morning.

We can think of a definite time, even when we don't say the time.

I soldered it. (when I fixed it)

What was wrong with it? (before you fixed it)

4 Complete these sentences with the correct form of the word in brackets. Use the Present Perfect or Past Simple.

- 1 you these statistics recently? (update)
- 2 The machining centre three times last week. (break down)
- 3 Oh dear. I think I a screw. (lose)
- 4 I alongside a lot of good engineers in my life. (work)
- 5 We this measuring machine three years ago. (buy)
- 6 When the parts? (arrive)
- 7 you any samples recently? (take)
- 8 When I found the loose connection, I the wires. (solder)
- 9 Who is that man in workshop 2? I him before. (not see)

5 Work with a partner.

A – look at the notes below.

B – look at file 36 on page 116.

A

- 1 You are the supervisor. Last Monday, you gave your partner this list of jobs to do. You want to know how they are getting on. Read the list and prepare questions to ask.

Have you fixed / checked / investigated the ...?

What was wrong with it / them?

6 Prepare to update another student on your progress at work.

- 1 Write a list of your jobs. Include some things that you've done recently and some things that you need to do. Mix them up.
- 2 Exchange your list with another student and take turns to ask and answer questions about them.

Have you fixed the generator yet?

No, we haven't. The parts we need haven't arrived yet.

JOB

1 Fix energy saving lamp in reception	<i>Perhaps the transformer is broken?</i>
2 Investigate the complaint about heating system in Workshop 6B	<i>Problem adjusting temperature</i>
3 Replace the damaged safety guard on milling machine in Workshop 2	<i>New guard delivered last Friday</i>
4 Inspect high voltage cable in Workshop 6B	
5 Rewire the plug on the production manager's desk lamp	<i>He doesn't know how to do it.</i>

- 2 Ask your partner about their progress. Find out if there are any problems.
- 3 Now change roles. Your partner is your supervisor. He / She gave you this list of jobs to do last Monday. Read the jobs and get ready to tell your partner what you have done.

JOB

1 Check the air tools	<i>Air supply OK but replaced 3 leaking hoses. Tuesday 3pm.</i>
2 Find out why the grinding machine is making a funny noise	<i>Wednesday 12.30 am. Looked at it. No idea what's wrong.</i>
3 Repair the leaking pipe in Workshop 4A	<i>Fixed Thursday 10.45 am. No problem!</i>
4 Check the oil and air filters on compressor A-96	<i>Replaced air filters. Need to order oil filters.</i>
5 The showerhead in my apartment is blocked. Please look at it if you get time.	<i>Replaced showerhead Friday 2 pm. Cindy has some more jobs she wants me to do.</i>

- 4 Answer your partner's questions and tell them about your progress.