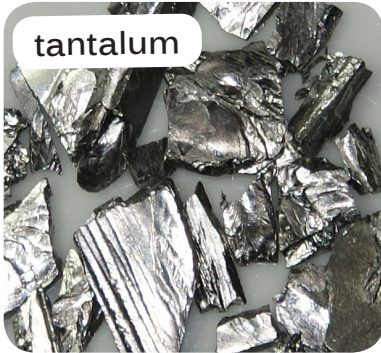


OLD GADGETS

How many old gadgets do you have in your house and where do you keep them? Do you plan to do anything with them?

- 🔊 Your old gadgets contain valuable elements. Can you name any? Listen to the first part of the interview and note down the three mentioned and when they will run out.



- 🔊 Listen to the next part of the interview and note down the interviewer's question.

🗣️ What do you think the answer is?

- 🔊 Listen to the next part of the interview and note down Mindy Dulai's answer.

🗣️ Had you heard of tantalum before?

- 🔊 What could cause the elements to run out quicker? Listen to the next part of the interview and check your ideas.

- 🔊 Listen to the next part of the interview and note down the interviewer's question.

🗣️ What do you think the answer is?

- 🔊 Listen to the next part of the interview and note down Mindy Dulai's answer.

- 🔊 Can you complete this trinity: r_____, r_____, recycle? Listen to the next part of the interview, check your ideas and explain the trinity.

- 🔊 Listen to the next part of the interview and note down the interviewer's question.

- 🔊 Listen to the next part of the interview and note down Mindy Dulai's answer.

- 🔊 Listen to the next part of the interview and note down the interviewer's question.

- 🔊 Listen to the next part of the interview and note down Mindy Dulai's answer.

- 👤 Discuss these questions and then read the article and check your ideas:



- 1 Which countries are the rare elements mined in?
- 2 What type of clothing is silver used to make?
- 3 What percentage of households are holding on to at least one unused electronic device?
- 4 Why do most people say they keep their old smart TVs, e-readers and phones?
- 5 What percentage of people say they have no plans to recycle or sell their devices once they stop using them?
- 6 Which age groups hoard the most and the fewest electronic devices at home: 16 to 24 / 25 to 45 / 46 to 55 / 55 to 75?

The Telegraph

October 2019



Britain's 'stockpile' of unused gadgets puts future of life-saving technologies at risk

Britain risks running out of the material needed to make pacemakers and hearing aids, as they're trapped in tens of millions of unused gadgets 'stockpiled' in cupboards and drawers across the country.

Rare elements such as tantalum, which helps power pacemakers, and yttrium, which can treat some cancers, are used to make smartphones, and are mined in countries including Australia, China and Brazil.

Mindy Dulai, the senior policy advisor for the Royal Society of Chemistry, warned that a number of them were "finite", and could run out within the next 100 years.

"We mine them and as they sit in our phones and devices, if we lock them away in cupboards and attics then unfortunately we can't get back those precious elements," she told the Today

programme.

Other rare elements used in gadgets include indium, which is also needed for fire sprinkler systems, and silver, which makes antibacterial clothing.

In a survey of more than 2,300 people for the Royal Society of Chemistry, 51pc of households said they were holding on to at least one unused electronic device, whilst 45pc said they had between two and five old gadgets in their drawers and cupboards.

Most people said the reason they were keeping their old smart TVs, e-readers and phones was in case they needed a spare. Around 80pc said they had no plans to recycle or sell on the devices once they stopped using them.

The Royal Society of Chemistry said it had commissioned the survey amid growing fears that the elements used to make things like smartphones would soon run out, potentially making it harder to create other products.

Whilst some gadgets may become obsolete, and so the elements will no longer be needed for them, Ms Dulai said there could be more demand coming from newer

technologies.

She said: "We know the pace of technology is advancing rapidly, so say if we have these fantastic chips implanted in our brains, potentially they may need to use things like tantalum or gallium or indium as well."

The survey found that people aged between 16 and 24 were hoarding the most electronic devices at home, more than half of them owning 10 or more gadgets, while those aged between 55 and 75 years old had the fewest devices.

The society said this meant the problem "could be set to grow". Because of this, the society called for action from governments, manufacturers and retailers to make it easier for people to recycle their gadgets.

"The UK has a tremendous opportunity to become a world leader in this and set an example for other nations to follow," it said.



- 👤 Read the article again and underline the facts that were also mentioned in the interview, and circle any new facts.
- 🗣️ Has the interview and article inspired you to recycle your old gadgets?

🔍 Find expressions in the article that mean the following.

- 1 a noun that means a small, mechanical or electronic device
- 2 a phrasal verb that means (of a supply of something) be used up
- 3 a word partnership that means a device used to help you hear better
- 4 an adjective that means of great value
- 5 a phrase that means in order to be prepared for something that may happen
- 6 a verb that means to collect large amounts of something and keep it for yourself
- 7 an adjective that means extremely good or impressive; excellent
- 8 a phrase that means to behave in a way that other people should copy

📝 Complete these sentences with the words and expressions:

- 1 I need a _____, I can't hear anything anymore.
- 2 John _____ magazines. He never throws any away. There are piles of them all over his house.
- 3 The latest _____ I bought is a bluetooth speaker.
- 4 Platinum is one of the most widely-used _____ metals because of its versatility.
- 5 We have _____ of ink for the printer. Can you buy some more?
- 6 Take an umbrella with you _____ it rains.
- 7 The CEO _____ for his workers by arriving early and staying late.
- 8 The decorators did a _____ job. The office looks fantastic.

📖 What does the highlighted expression in this extract from the article mean?

The Telegraph

October 2019

...puts future of life-saving technologies **at risk**...

👤 There are a number of expressions in English that talk about being 'at' something.



Say what you think these mean:

- | | |
|------------------------------|-------------------------|
| 1 at fault | 2 at loggerheads |
| 3 at sixes and sevens | 4 at a loose end |
| 5 at random | 6 at large |
| 7 at liberty | 8 at stake |

📝 Now match them to these definitions:

- | | |
|---------------------------------|--|
| ___ in a state of confusion | ___ escaped or not yet captured |
| ___ in the wrong | ___ in disagreement; blocked by differing opinions |
| ___ have nothing specific to do | ___ without method or conscious decision |
| ___ in danger of being lost | ___ free (to do something) |

📝 Write sentences of your own that show you understand the meaning of the expressions.

*e.g. The police say the robbers are **at large** and are asking for information from the public to help catch them.*

teacher's notes: page 1/2 **student pages:** 3 **level:** B1+ **week of:** 28.10.19

 Find expressions in the article that mean the following.

- 1 gadget
- 2 run out
- 3 hearing aid
- 4 precious
- 5 in case
- 6 hoard
- 7 tremendous
- 8 set an example

 Complete these sentences with the words and expressions:

- 1 hearing aid
- 2 hoards
- 3 gadget
- 4 precious
- 5 run out
- 6 in case
- 7 set an example
- 8 tremendous

 What does the highlighted expression in this extract from the article mean?

at risk = in danger; exposed to harm

 Now match them to these definitions:

- | | |
|--------------------------------------|---|
| 3 in a state of confusion | 6 escaped or not yet captured |
| 1 in the wrong | 2 in disagreement; blocked by differing opinions |
| 4 have nothing specific to do | 5 without method or conscious decision |
| 8 in danger of being lost | 7 free (to do something) |

 **Transcript**

- 1** And here's a fairly safe bet. I bet you've got an old phone or an old laptop or some sort of old tech device lying about the house, stuffed in a drawer, cupboard or whatever. You keep meaning to get rid of it, but never get around to it. Well, you should because those things may be valuable. They contain elements that the Earth is running out of. Mindy Dulai is the senior policy adviser at the Royal Society of Chemistry. Good morning to you. Good morning John. What, what's in them that is so valuable. So, this year is the International Year of the Periodic Table and we felt at the Royal Society Chemistry it's a great opportunity to highlight these elements like gallium, like tantalum, like silver, that are actually very precious and valuable and set to run out in the next 100 years. Oh really. Absolutely, so a number of these elements are finite, we mine them and as they sort of sit in our phones and devices, if we, sort of, lock them away in cupboards and attics then unfortunately can't get back at those precious elements and be able to reuse them.
- 2** And how much is there, I mean what, take the most what, what is the most valuable, the most scarce?
- 3** So, I think all of those elements are actually valuable and scarce because, if you think about it we need all of them in order to be able to, you know, use these tech devices, but they also have

teacher's notes: page 2/2

other uses as well. So, if you take something like tantalum for example. I've never heard of tantalum. Am I unusual in that? No, absolutely not. So tantalum is really important because you use it in the small electronic components that make up phones and other gadgets as well. But,

- ④ Mind you, some people would say, gosh, in 100 years I mean will we ever, will we have mobile phones, we will have little chips in our brains, if we're still here? Well, that's a good point John actually because I suppose the issue is those are the current uses of tantalum, so phones and those medical uses as well. But, what if we find new uses for it too in the next 100 years.
- ⑤ So we've got the old phone or the old laptop or whatever. What do we do with it? Where do we
- ⑥ Okay. So I think one of the challenges is, is sort of, like as you say, knowing what to do with it, so you can look at places like Recycle Now which can let you know whether or not your local... That's a website is it? That's right. Yeah. Look at whether your local waste collection facility can actually
- ⑦ Are they worth money? I mean, if you had half a dozen, old mobiles or something would they be worth any cash? Potentially and we would say as well that when you're looking at these old devices it's about following that reduce, reuse, recycle trinity as it were. So, it's sort of reducing
- ⑧ And if it has that sort of value, shouldn't the manufacturers of mobile phones, shouldn't they
- ⑨ So this is one of the things that we're calling for, we're calling for a sort of concerted action across different actors. So, you know, we talk about all of us thinking about whether or not we need to upgrade, but also we need manufacturers to be making sure that these things are reusable,
- ⑩ A very quick one, two seconds, what's an old phone, five-year-old, five-year-old mobile, what's
- ⑪ Oh, good question. I'm afraid I think you'd have to probably go and ask a retailer or a manufacturer rather than a chemist? But it's a few quid. I

actually it's really vital for things like pacemakers, joint replacements as well, so it has all of these other very very valuable uses. And it is in really short supply. So it's one of those elements that we expect to run out within 100 years, if we carry on using it at current rates.

You know, we know the pace of technology is advancing rapidly. So taking your example, if we've got these fantastic chips that are sort of implanted... I didn't say they were fantastic. But if we do have those, potentially they may need to use things like tantalum or gallium or indium as well.

take it?

take electrical items. Some retailers operate take-back schemes as well. But one of the things that we found in the survey that we carried out is, as you rightly point out, most people just don't know what to do with these devices.

our consumption. So could you hang on to a phone for three years rather than two, do you necessarily need to upgrade? Could you pass it on to a relative or, as you rightly point out, could you sell it on as well if it's still usable?

be sort of saying, you know, we will buy them off you and here's a price?

that we can actually build these phones, these gadgets, these devices to get things back out, and that they do so proactively and work with retailers and with government and with other stakeholders to make sure that we're getting the best use we can out of these elements.

it worth?

suspect so yes. All right. Thanks very much indeed. Mindy Dulai thank you.