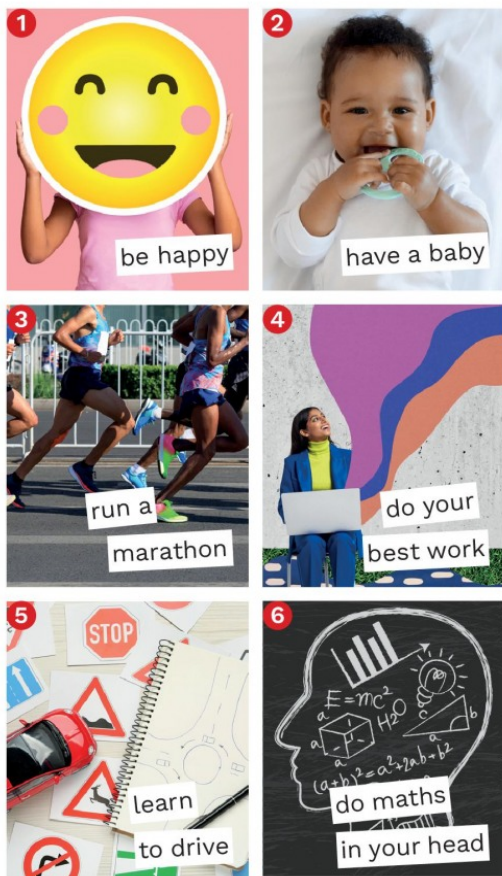


Is someone different at age 18 or 60? I believe one stays the same.

Hayao Miyazaki, Japanese film-maker

1 READING & SPEAKING

- a** Look at photos 1–6. In pairs, say what you think is generally the best age for each of these things, based on what you know or personal experience.



- b** According to recent research, the ages in the list below are best for the things in **a**. Try to match them to photos 1–6. Do any of them correspond to the ages you discussed?

17 28 31 40 50 69

- c** Now read the article and check your answers to **b**. Circle the ages in each paragraph.

Glossary

AA (Automobile Association) an organization which provides support and advice for motorists in the UK

The perfect age for everything

There are some things we may not be looking forward to as we get older, but research is increasingly showing that many of our mental and physical peaks occur well after our youth. There's a best age to do everything, from resolving conflicts to running marathons...

A Be happy Studies have proved happiness isn't necessarily for the young, and definitely not for the middle-aged, who always come out of the data the most miserable. A study at the London School of Economics using German data found that people aged 69 were at the peak of wellbeing, and there was also a smaller peak at 23. Those aged 45–54 were at the lowest point. 'We usually see happiness develop over life as a U-curve,' says Meik Wiking, the chief executive of the Happiness Research Institute. 'One theory is that we become better at prioritizing what matters most, choosing what will improve our happiness.'

B Have a baby Biologically speaking, our grandmothers were right: the time to have babies is from the late teens to early twenties. The decline in fertility starts from about 32, and this accelerates rapidly from 37. However, John Mirowsky, at the University of Texas, spent years studying the data, and found that women who felt fittest and most energetic in middle and old age had their first babies at 29 or 30, and those with the lowest rates of chronic disease and pain in later life had them at 34, as did those who lived the longest. That gives rise to a best age of 31, he concluded.

C Run a marathon You may expect it to be younger because aerobic fitness as measured by oxygen uptake peaks between 23 and 25. That's the best age range for shorter races, but marathon-running requires more skills. 'It's a combination of strength, speed, endurance, and the actual experience of running marathons,' says John Brewer, professor of applied sports science and veteran of 19 London marathons. 'You rarely run your best marathon first – there's a learning effect of running 26.2 miles – the build-up, diet, hydration, pacing, and mental attitude.' A Spanish study of New York marathon times shows that 18-year-olds take as long to finish as 55-year-olds, while the best times for men were achieved at 27, and for women, 29.

D Do your best work Einstein claimed that if you hadn't made a great contribution to science before 30, you never would, but research shows that 40 is now the age at which most Nobel prize-winning work is conducted. That also holds true for lesser mortals with more mundane jobs, concluded the authors at the US National Bureau of Economic Research. Another study seems to back that up: researchers in Canada conclude that the best-quality academic papers are written 12 years into a person's career, and after that, quality and quantity tended to decline.

E Learn to drive You're more likely to pass your test if you take it aged 17, according to government figures. That's when pass rates are the highest: 58 per cent for boys and 53 per cent for girls. Pass rates then fall steadily throughout life to about 35 per cent in your fifties. 'It's probably because 17-year-olds are used to learning and their brains are open to new skills – I've watched 26-year-olds learning and they definitely find it more difficult, possibly because they are more scared,' says Edmund King, the president of the AA. However, whether 17 is the safest age is another question. Young drivers (aged 17 to 24) make up 18 per cent of drivers involved in road accidents, despite doing only 5 per cent of miles.

F Do maths in your head You may expect younger brains, with their superior processing speeds, to be best at arithmetic, but a study of 48,000 people's cognitive powers across the ages revealed the peak for mental maths was actually 50. Why? Possibly because older adults have more experience, so they use a better mix of strategies to work out sums, to compensate for their slower speed. However, Professor Stuart-Hamilton, at the University of South Wales, suspects it might be a generational thing. 'I'm 58 and I was drilled in mental arithmetic at school, and I've had students look at me like I'm a master of the dark arts because I can multiply 56 by 24 in my head,' he says.

d Scan the article and mark the statements **T** (true) or **F** (false).

- 1 Researchers in Canada found that older academics tend to produce fewer papers.
- 2 Meik Wiking thinks that older people rarely know what makes them happy.
- 3 Edmund King concludes that younger drivers are the safest drivers.
- 4 John Brewer believes that experienced runners are better at running marathons.
- 5 John Mirowsky suggests that women who live the longest tend to have had babies in their late 30s.
- 6 Many of Professor Stuart-Hamilton's students are less good than him at mental maths.

e Which decade of life do you think will probably be the perfect one for each of these things?

concentrating well resolving conflicts
getting married making friends

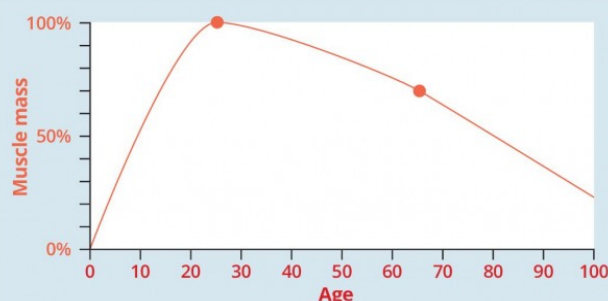
f **C Communication** The perfect age **A p.90**
B p.94 Read and tell each other about your 'perfect ages'. Did you guess correctly in **e**?

g Are the 'best ages' typical of or different from your own experiences, or those of people you know?

2 VOCABULARY research language

a Look at the graph and complete the gaps with verbs from the list in the correct form.

analyse decline increase peak reveal



Build muscle 25 When we're living until 81, it seems unfair that muscle mass ¹ _____ at 25 and then ² _____ by 5 per cent each decade, with a noticeable downturn from 60. 'That doesn't mean at 26 you can sit and think you're over the hill,' says Professor Brewer. 'It's really a case of use it or lose it. Strengthening exercises can keep muscles working at a very high level.' After ³ _____ data from over 1,000 volunteers, one study ⁴ _____ that even those in their seventies, eighties, and nineties could ⁵ _____ their muscle mass by 100 per cent (i.e. double it) after ten weeks of resistance training.

b Look at the verbs related to research. With a partner, say what you think the difference in meaning is in each pair.

- | | | | |
|-----------|----------|--------------|------------|
| 1 rise | peak | 5 increase | accelerate |
| 2 decline | decrease | 6 conclude | prove |
| 3 examine | analyse | 7 prioritize | rank |
| 4 show | reveal | 8 claim | state |

c Complete the sentences with a verb from **b** in the correct form. Sometimes more than one answer is possible.

- 1 I think we need to _____ discussing the budget, as it's currently more urgent.
- 2 To scientists' surprise, the 30-year study _____ no correlation between a vegan diet and good health.
- 3 The writer _____ to be the first to investigate this connection.
- 4 The popularity of live TV has significantly _____ over the last ten years, as people move to streaming services.
- 5 The study has _____ that a larger brain doesn't necessarily make an animal more intelligent.
- 6 After years of steady improvement, driving test pass rates _____ at 60%, and have been dropping over the past few years.
- 7 We're expecting house prices to _____ by approximately 7%, but then to fall again.
- 8 Before we publish the results in our paper, we will need to _____ our research in detail.

d **3.1** Listen and check. Then look at the verbs in **b** again and circle the ones that are nouns as well as verbs. What is the noun form of the other verbs?

3 PRONUNCIATION verb / noun word stress

a Look at the two sentences below. What difference is there in pronunciation between the two **highlighted** words?

- 1 It's predicted that the divorce rate will **decrease** over the next five years.
- 2 It's predicted that there will be a **decrease** in divorces over the next five years.

b **3.2** Listen and check.

c The two-syllable words in the list below are all stressed on the second syllable when they are verbs. Say each word in the noun form with *the* (e.g. *the decline*). Circle the ones where the stress **doesn't** change.

decline increase research survey produce
record conflict protest update contract
advance control address extract

d **3.3** Listen and check.



4 LISTENING & SPEAKING

- a** Look at the photos of young people who have done inspiring things. Have you heard of any of them?
- b** **Video** Watch *Inspiring young people*, a documentary about some of the young people in **a**. Then, for each, say...
- what issue inspired them.
 - what they did about it.
 - what they've done since then.
- c** Watch again and make notes about any other interesting details in the documentary.
- d** In pairs, compare your notes. Is there anything to add from your partner's notes?
- e** Choose one of the other young people in **a**. Research more information about them and organize your notes. Then work in groups. Present a short profile of the person you chose.

5 GRAMMAR

determiners: articles and quantifiers

- a** Check what you know about articles and quantifiers. Complete the information about three of the people in **4** with *a*, *the*, *some*, or *–* (no article).

Adut Akech was born in ¹ _____ Sudan on ² _____ Christmas Day. Her debut as ³ _____ model was in ⁴ _____ local fashion show. She appeared on ⁵ _____ cover of ⁶ _____ *British Vogue* for ⁷ _____ March 2024 issue, which celebrated 40 icons in ⁸ _____ fashion industry.

Paul Mescal is ⁹ _____ Irish actor. His mother was ¹⁰ _____ police officer and his father was ¹¹ _____ schoolteacher. ¹² _____ eldest of three children, he has ¹³ _____ brother and ¹⁴ _____ sister. He starred in ¹⁵ _____ *Gladiator II*, ¹⁶ _____ Ridley Scott's sequel to ¹⁷ _____ 2000 historical drama.

Billie Eilish and her older brother were homeschooled, ¹⁸ _____ decision their parents made to spend ¹⁹ _____ time with them and give them ²⁰ _____ freedom to pursue their interests, including ²¹ _____ art, ²² _____ dancing, and ²³ _____ acting. Eilish did ²⁴ _____ acting auditions, but she disliked them and preferred to concentrate on ²⁵ _____ music.

- b** **3.4** Listen and check.
- c** **Grammar Bank 3A exercises p.142**

6 PRONUNCIATION

stressed and unstressed articles

- a**  **3.5** Listen to a short conversation. How are *a*, *the*, and *some* pronounced? Are they stressed or unstressed? What other way can *the* be pronounced?

- A** Are you having a holiday this summer?
B Yes, we've got some time off in July, so we're going to the Lake District.
A Don't you usually go abroad?
B Yes, but we've decided to stay in the UK and rent a cottage. We're trying to cut down on air travel, you know, to save the planet. We're big fans of Greta Thunberg...

- b** Listen again and underline any other words or syllables that contain the /ə/ sound.

- c**  **3.6** Listen to two more conversations. Why are the **highlighted** articles stressed? How are they pronounced?

- 1 **A** Did you find the dress you wanted for the wedding?
B I found **a** dress, but not the style I really wanted.
- 2 **A** Did you meet anyone new last night?
B I met **the** guy.
A **The** guy?
B Yes, the one I've been waiting for all my life!

- d**  **3.7** Listen to two more conversations. When does the speaker stress *the*? Why?

7 SPEAKING

- a** Look at the topics in *Just a Minute* and consider what you might say about them for a few minutes.
- b** Work in groups of three, **A**, **B**, and **C**. Read the rules for playing the game.
- c** Now play three (or more) rounds. At the end of each round, note how many times the speaker was stopped. Who was stopped the fewest times?

Language for restarting after an interruption

*Where was I? Oh yes, I was talking about...
 Anyway, as I was saying...*

JUST A MINUTE

- 1 The best age to learn a sport
- 2 Something I feel passionate about
- 3 An inspirational teacher
- 4 A time when I got completely lost
- 5 One of the most beautiful places I've been to
- 6 What I was like as a child
- 7 The device I rely on the most
- 8 The subject I hate(d) most at school
- 9 How to spend a perfect weekend
- 10 Another language I would love to learn



RULES

Your challenge is to talk for one minute without making any mistakes.

ROUND 1

- A** You are the timekeeper. Choose which topic you would like **B** to talk about. Then tell **B** the number of the topic and start timing. Whenever **C** says *stop*, pause the timer, and discuss whatever mistake **C** thinks **B** has made. Continue until **B**'s minute is up.
- B** You are going to try to speak for one minute on whichever topic **A** gives you, as accurately and fluently as possible. If **C** thinks you have made a mistake, they will tell you to stop.
- C** You are going to listen to **B** talk for a minute about one of the topics. If you think **B** has made a mistake (grammar, vocabulary, or pronunciation), say *stop*, and between the three of you, agree how to correct it. Make a note of how many times **B** made a real mistake during their turn.

ROUND 2

B is now the timekeeper, **C** talks for a minute, and **A** listens for mistakes.

ROUND 3

C is now the timekeeper, **A** talks for a minute, and **B** listens for mistakes.