

## UNIT 5: INVENTIONS

## I: VOCABULARY

STT	Loại từ	Nghĩa
1	n.phr	in ba chiều
2	v	hành động
3	n	lợi thế
4	v	cho phép
5	v	làm ngạc nhiên
6	n	ứng dụng
7	v	áp dụng
8	n.phr	trí tuệ nhân tạo
9	n	pin
10	v	đặt trước
11	n	nút bấm
12	v	sạc pin
13	adj	rè ≠ đất
14	n	bạn cùng lớp
15	v	giao tiếp
16	n	máy tính
17	n,v	điều khiển
18	adj	thuận tiện
19	n	khách hàng
20	n	nhà thiết kế
21	v	phát triển
22	n	thiết bị
23	n	hiển thị
24	adj	khó khăn
25	n	khoảng cách
26	n	tài liệu
27	adj	không người lái
28	adj	hiệu quả
29	n	cảm xúc
30	n	thiết bị đọc sách điện tử

STT	Loại từ	Nghĩa
31	n	ví dụ
32	n	thí nghiệm
33	v	bày tỏ
34	n	chuyến bay
35	n	đò nội thất
36	n	phản cứng
37	v	cài đặt
38	v	phát minh
39	n	phát minh
40	n	phòng thí nghiệm
41	n	máy tính xách tay
42	n	người học
43	adj	nhẹ ≠ nặng
44	n	máy móc
45	v	đo đạc
46	adv	có lẽ
47	adj	di động
48	adj	mạnh mẽ
49	n	bộ xử lý
50	v	nhận ra
51	n	tuyên đường
52	n	robot
53	n	kích thước
54	n	điện thoại thông minh
55	n	phản mềm
56	n	vết bẩn
57	n.phr	dung lượng lưu trữ
58	v	lưu trữ
59	adj	phù hợp
60	adj	có giá trị

## II: STRUCTURES

STT	Cấu trúc	Giải thích	Ví dụ
1		Cấu trúc mô tả mức độ cần thiết, dễ/khó... để làm gì	<i>It is easy to use this device.</i>
2		Cấu trúc cảm nhận việc gì như thế nào	<i>She finds it hard to understand the manual.</i>
3		Động từ nguyên mẫu làm chủ ngữ	<i>To invent something useful is not easy.</i>
4		Giới thiệu và nhấn mạnh các đại từ quan hệ như <i>who, which, that</i>	<i>The machine that he invented is helpful.</i>
5		Mệnh đề quan hệ xác định và không xác định (phân biệt dấu phẩy)	<i>The laptop, which I bought yesterday, is expensive.</i>
6		Câu bị động thì hiện tại và quá khứ	<i>The device was invented in 2001. It is used worldwide.</i>
7		Thói quen trong quá khứ	<i>People used to write letters by hand.</i>
8		Khiến ai đó làm gì / trở nên như thế nào	<i>This app makes studying easier.</i>
9		Đủ ... để làm gì	<i>This battery is powerful enough to run the car.</i>
10		Quá ... để làm gì	<i>The robot is too expensive to buy.</i>
11		Diễn tả việc cần được làm (bị động gián tiếp)	<i>This room needs to be cleaned. / This room needs cleaning.</i>
12		Quá ... đến nỗi mà...	<i>The software is so complicated that I can't use it.</i>

## III: Collocations

STT	Collocation	Nghĩa	Ghi chú
1		phát minh ra	Dạng học thuật
2		nảy ra ý tưởng	Dạng phổ thông
3		cài đặt phần mềm	Thường gặp trong IT
4		sạc pin / thiết bị	Cụm phổ dụng
5		lưu trữ dữ liệu	Dùng nhiều trong công nghệ
6		phát triển thiết bị / ứng dụng	Dạng chính thống
7		giao diện dễ sử dụng	IT & sản phẩm công nghệ
8		tài nguyên / phát minh có giá trị	Dạng học thuật

STT	Collocation	Nghĩa	Ghi chú
9		trí tuệ nhân tạo	Cụm học thuật cố định
10		xe / công nghệ không người lái	Cụm công nghệ tiêu biểu
11		thiết bị di động	Thường dùng trong miêu tả sản phẩm
12		sự tiến bộ công nghệ	Collocation học thuật
13		ghi chú	Gián tiếp xuất hiện trong bài đọc

#### IV: GRAMMAR

##### A. PRESENT PERFECT (THÌ HIỆN TẠI HOÀN THÀNH):

###### a. Công thức:

Thẻ khẳng định	
Thẻ phủ định	
Thẻ nghi vấn	

###### b. Cách sử dụng:

- **Dùng để nói đến sự việc ..... nhưng có ..... kéo dài đến .....**

Vd: I HAVE LOST my car key so can't go to work right now. (Tôi đã làm mất chìa khóa xe nên tôi không thể đi làm ngay bây giờ được)

I HAVEN'T EATEN anything. Now, I am hungry. (Tôi chưa ăn bất cứ thứ gì. Bây giờ tôi đói)

- **Dùng để nói đến sự việc ..... và .....**

Vd: We HAVE LIVED in this house for 10 years. (Chúng tôi đã sống trong căn nhà này được khoảng 10 năm)

Lisa HAS WORKED as an English teacher since 2000. (Lisa đã làm việc như là 1 cô giáo tiếng Anh từ năm 2000)

- **Dùng để nói về sự việc .....**

Vd: Dung HAS JUST FINISHED his work. (Dung chỉ mới vừa hoàn thành công việc của anh ấy)

HAVE YOU SEEN any good films recently?

###### \* Một số từ nhận dạng của thì hiện tại hoàn thành:

..... (vừa mới đây), ..... (vừa mới hoàn thành), ..... (chưa), ..... (mới đây), ..... (gần đây)
..... ..... (chưa bao giờ trước đó), ..... (tính đến bây giờ), ..... (gần đây),
..... ..... time (lần thứ nhất, thứ hai, thứ ba,...), ..... ..... (nhiều lần)
..... (khoảng nhiều năm), ..... (đã lâu), ..... (bao lâu)
..... + mốc thời gian (kể từ khi); ..... + khoảng thời gian (khoảng)

###### Ví dụ:

I HAVE BROKEN my watch so I don't know what time it is. (tôi đã làm vỡ đồng hồ nên tôi không biết bây giờ là mấy giờ)

She HASN'T ARRIVED yet. (Cô ấy vẫn chưa đến)

This is the second time they HAVE MEET together. (Đây là lần thứ hai họ gặp nhau)

HAVE you SPOKEN to Binhh yet? (Bạn đã nói chuyện với Binhh chưa?)

Up to now we HAVE VISITED 14 countries in the world. (Tính đến bây giờ, chúng tôi đã đi đến 14 quốc gia trên thế giới)

### B. GERUND AND TO-INFINITE (ĐỘNG TỪ DẠNG V-ING VÀ TO-V0):

#### 1. Gerund (Động từ dạng V-ing):

\*Động từ dạng V-ing được sử dụng khi:

- Đúng sau 1 số động từ:

..... (thùa nhện)
..... (cho phép)
..... (tránh)
..... (xem xét)
..... (phù nhện)
..... (không thích)
..... (ghét)

..... (thích)
..... (hoàn thành)
..... (phiền)
..... (không phiền)
..... (bỏ lỡ)
..... (cho phép)
..... (trì hoãn)

..... (thực hành)
..... (từ bỏ)
..... (đè nghi)
..... (mạo hiểm)
..... (đè nghi)

Vd: We have *finished* DOING our exercises. (Chúng tôi đã hoàn thành xong việc làm bài tập)

They *dislike* PLAYING soccer. (Họ không thích việc chơi bóng đá)

We *detest* STEALING someone else's files. (Chúng tôi ghét việc ăn cắp tài liệu của người khác)

- **Làm chủ ngữ trong câu:**

Vd: SWIMMING in a swimming pool is very interesting. (VIỆC BƠI LỘI trong hồ bơi thì rất thú vị)

FLYING on the raining days is very dangerous. (VIỆC BAY vào những ngày mưa thì rất là nguy hiểm)

EATING at night is not good for your health. (VIỆC ĂN vào buổi tối thì không tốt cho sức khỏe của bạn)

#### 2. To-infinitive (Động từ dạng To V0):

\*Động từ dạng To V0 được sử dụng khi:

- Đúng sau 1 số động từ:

..... (đủ khả năng)
..... (đồng ý)
..... (xuất hiện)
..... (sắp xếp)
..... (quyết định)
..... (yêu cầu)
..... (xứng đáng)
..... (mong đợi)
..... (thất bại)
..... (do dự)
..... (hi vọng)
..... (học)
..... (xoay sở)
..... (ý định)
..... (cân)
..... (đề nghị)
..... (lên kế hoạch)
..... (chuẩn bị)
..... (giả vờ)
..... (hứa)
..... (tử chối)
..... (dường như)
..... (đe doạ)
..... (tình nguyện)
..... (đợi)
..... (muốn)
..... (mong)
..... (muốn)
..... (yêu thích)

- **Sử dụng trong công thức đưa ra ý kiến “It's (not) + adj + To V0” (nó thì ... để làm gì đó).**

Vd: ..... (Nó thì khó để làm tăng nhận thức của mọi người về vấn đề bản quyền)

: ..... (Nó thì vui để học tiếng Anh)

- **Làm chủ từ trong câu.**

Vd: : ..... (tập thể dục thì rất quan trọng cho anh ấy)

### **\*LUU Y:**

- Một số động từ như “....., “....., “.....,...” có thể được theo sau bởi cả V-ing và To V0.

Vd: I love SEARCHING/TO SEARCH for information in the Internet. (Tôi thích tìm kiếm thông tin trên mạng)

- Một số động từ như ““....., “....., “....., “.....,...” có các trường hợp đặc biệt + V-ing HOAC + **O** + to V0

## **IV. PRACTICE EXERCISES**

Mark the letter A, B, C, or D to indicate the word or phrase that best fits the blank in each sentence.

1. My digital camera's \_\_\_\_\_ lasts for approximately eight hours when fully charged.  
 A. battery      B. power      C. energy      D. capacity
2. She bought a new \_\_\_\_\_ yesterday that can translate conversations in real-time.  
 A. smartphone      B. device      C. gadget      D. handset
3. You need to \_\_\_\_\_ the latest update before you can use all the features.  
 A. download      B. activate      C. install      D. upload
4. The science center has a friendly \_\_\_\_\_ that guides visitors through the exhibitions.  
 A. assistant      B. robot      C. guide      D. machine
5. John asked me to \_\_\_\_\_ tickets for the concert next weekend as they're selling quickly.  
 A. reserve      B. book      C. purchase      D. order
6. I carry my lightweight \_\_\_\_\_ everywhere because I might need to work unexpectedly.  
 A. notebook      B. laptop      C. computer      D. tablet
7. This creative \_\_\_\_\_ allows children to design their own animated characters.  
 A. software      B. program      C. application      D. platform
8. The high-resolution \_\_\_\_\_ on this monitor reduces eye strain during long work hours.  
 A. display      B. screen      C. panel      D. interface
9. Our team is currently \_\_\_\_\_ an app to help people track their daily water intake.  
 A. creating      B. building      C. designing      D. developing
10. Remember to \_\_\_\_\_ your devices overnight before our long journey tomorrow.  
 A. charge      B. energize      C. recharge      D. power
11. The walking \_\_\_\_\_ between the hotel and the beach is about fifteen minutes.  
 A. journey      B. route      C. path      D. distance
12. The doctor recommended using this \_\_\_\_\_ to monitor your blood pressure at home.  
 A. device      B. instrument      C. apparatus      D. equipment
13. The computer \_\_\_\_\_ needs upgrading because it's becoming too slow for new programs.  
 A. components      B. hardware      C. system      D. equipment
14. I downloaded a fitness \_\_\_\_\_ that creates personalized workout plans based on your goals.  
 A. application      B. program      C. app      D. software
15. Many modern cars now use \_\_\_\_\_ to improve safety and driving experience.  
 A. smart technology      B. automated systems      C. digital assistance      D. artificial intelligence
16. These chairs are \_\_\_\_\_ for outdoor use as they're made from weather-resistant materials.  
 A. designed      B. suitable      C. appropriate      D. intended
17. The security system will \_\_\_\_\_ your face even in low light conditions.  
 A. recognise      B. authenticate      C. identify      D. detect
18. The museum has an exhibition showing how \_\_\_\_\_ is changing modern manufacturing.  
 A. nanotechnology      B. artificial intelligence      C. 3D printing      D. robotics
19. A \_\_\_\_\_ processor would make this computer run much more smoothly when editing videos.  
 A. powerful      B. advanced      C. newer      D. faster
20. The school rules don't allow students to use mobile phones during \_\_\_\_\_.

A. instruction hours	B. class time	C. teaching sessions	D. educational periods
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21. You'll need additional \_\_\_\_\_ if you plan to save many high-definition videos.

A. storage space	B. memory capacity	C. disk drive	D. cloud backup
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22. We took an \_\_\_\_\_ route to avoid the heavy traffic in the city center.

A. secondary	B. different	C. alternative	D. substitute
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23. Sarah reads books on her e-reader during her daily train \_\_\_\_\_ to work.

A. journey	B. travel	C. trip	D. commute
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24. The size of the apartment surprised us—it was much \_\_\_\_\_ than in the photos.

A. bigger	B. larger	C. roomier	D. spacious
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25. This \_\_\_\_\_ has completely changed how people communicate across long distances.

A. innovation	B. development	C. invention	D. technology
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26. The coffee \_\_\_\_\_ in our office makes different types of drinks at the touch of a button.

A. device	B. equipment	C. appliance	D. machine
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27. Most people now store their photos \_\_\_\_\_ instead of printing them out.

A. digitally	B. electronically	C. online	D. virtually
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28. Please \_\_\_\_\_ this document and return it to the office by Friday afternoon.

A. endorse	B. approve	C. sign	D. authorize
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29. Students conduct interesting experiments in the science \_\_\_\_\_ every Tuesday.

A. facility	B. laboratory	C. workspace	D. classroom
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30. The \_\_\_\_\_ engine makes this small car surprisingly fast on the highway.

A. strong	B. mighty	C. robust	D. powerful
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31. The shop assistant helped the \_\_\_\_\_ find the perfect gift for his mother.

A. shopper	B. client	C. customer	D. patron
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32. We bought \_\_\_\_\_ speakers to take to the beach party this weekend.

A. portable	B. wireless	C. lightweight	D. compact
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33. The fashion \_\_\_\_\_ used recycled materials for her latest collection.

A. artist	B. designer	C. creator	D. stylist
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34. Always \_\_\_\_\_ twice before cutting once when you're doing woodwork.

A. check	B. assess	C. calculate	D. measure
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35. This painting is \_\_\_\_\_ not only for its beauty but also for its historical significance.

A. valuable	B. precious	C. priceless	D. significant
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36. Many companies are testing \_\_\_\_\_ cars on public roads in certain cities.

A. automated	B. self-driving	C. driverless	D. autonomous
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37. It's important to \_\_\_\_\_ clearly when working in international teams.

A. speak	B. convey	C. interact	D. communicate
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38. Thomas Edison \_\_\_\_\_ many devices that greatly influenced modern life.

A. created	B. invented	C. developed	D. designed
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39. Our \_\_\_\_\_ was delayed by two hours due to bad weather conditions.

A. departure	B. trip	C. flight	D. journey
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40. Foldable furniture is very \_\_\_\_\_ for people living in small apartments.

A. practical	B. convenient	C. useful	D. handy
41. The teacher gave us an _____ to help us understand the complex concept.			
A. instance	B. illustration	C. demonstration	D. example
42. Everyone was _____ by the magician's disappearing trick at the party.			
A. amazed	B. impressed	C. astonished	D. stunned
43. Scientists _____ with new materials to create more efficient solar panels.			
A. research	B. observation	C. experiment	D. theory
44. One _____ of learning online is that you can study at your own pace.			
A. advantage	B. gain	C. profit	D. benefit
45. Children often _____ their feelings through drawings and creative play.			
A. show	B. display	C. express	D. reveal
46. The advanced course proved _____ for students without prior knowledge.			
A. complicated	B. challenging	C. hard	D. difficult
47. We might _____ consider moving to a bigger house next year.			
A. probably	B. perhaps	C. possibly	D. maybe
48. You can _____ this method to solve similar problems in your homework.			
A. use	B. employ	C. practice	D. apply
49. Parents should _____ how much time children spend watching television.			
A. control	B. manage	C. regulate	D. limit
50. Regular exercise is _____ for maintaining good physical and mental health.			
A. efficient	B. beneficial	C. effective	D. productive

## V: GRAMMAR PRACTICE EXERCISES

1. The lead researcher in charge of vaccine development \_\_\_\_ addressed the media since yesterday.

A. have                    B. has                    C. hasn't                    D. haven't

2. The advisory panel on climate policy \_\_\_\_ issued new recommendations.

A. have                    B. has                    C. hasn't                    D. haven't

3. The newly digitized archive \_\_\_\_ preserved historical letters from the 18th century.

A. have                    B. has                    C. hasn't                    D. haven't

4. The international academic network \_\_\_\_ expanded into six new regions.

A. has                    B. have                    C. hasn't                    D. haven't

5. The data analyst \_\_\_\_ submitted her findings to the economic review board.

A. have                    B. has                    C. haven't                    D. hasn't

6. The volunteer group \_\_\_\_ helped rebuild infrastructure in the affected area.

A. has                    B. have                    C. hasn't                    D. haven't

7. The neuroscience department \_\_\_\_ conducted over 50 experiments this term.

A. has                    B. have                    C. hasn't                    D. haven't

8. The postgraduate candidate \_\_\_\_ defended his thesis successfully.

A. has                    B. have                    C. hasn't                    D. haven't

9. Scientists \_\_\_\_ discovered a new species.







18. She couldn't help \_\_\_\_\_ at his clumsy attempt to dance at the wedding.  
A. laughing      B. to laugh      C. to laughing      D. laugh

19. We discussed implementing new security measures \_\_\_\_\_ sensitive data.  
A. to protecting      B. protect      C. to protect      D. protecting

20. I don't mind \_\_\_\_\_ to work overtime occasionally, but not every week.  
A. to having      B. have      C. to have      D. having

21. He suggested \_\_\_\_\_ the new restaurant that opened downtown last month.  
A. try      B. trying      C. to trying      D. to try

22. They avoided \_\_\_\_\_ questions about the controversial project during the press conference.  
A. to answer      B. answer      C. to answering      D. answering

23. She contemplated \_\_\_\_\_ her job to pursue her passion for photography.  
A. to quitting      B. quit      C. quitting      D. to quit

24. We arranged to meet at the train station before \_\_\_\_\_ to the conference venue.  
A. proceeding      B. to proceed      C. to proceeding      D. proceed

25. I'm used to \_\_\_\_\_ up early, so the 6 AM flight doesn't bother me.  
A. to wake      B. waking      C. to waking      D. wake

26. He resented having \_\_\_\_\_ himself repeatedly to people who weren't listening.  
A. to explaining      B. explain      C. explaining      D. to explain

27. They delayed \_\_\_\_\_ the product due to some technical issues that needed resolving.  
A. launching      B. to launch      C. to launching      D. launch

28. She managed \_\_\_\_\_ the marathon despite having injured her ankle two weeks before.  
A. completing      B. to completing      C. complete      D. to complete

29. We intend to renovate the entire house before \_\_\_\_\_ in next spring.  
A. moving      B. to move      C. to moving      D. move

30. I recommend booking tickets in advance \_\_\_\_\_ disappointment.  
A. to avoiding      B. to avoid      C. avoid      D. avoiding

31. He confessed \_\_\_\_\_ doubts about accepting the promotion and relocating.  
A. to have      B. have      C. to having      D. having

32. They finished \_\_\_\_\_ the presentation just minutes before the meeting started.  
A. prepare      B. preparing      C. to preparing      D. to prepare

33. She prefers cycling \_\_\_\_\_ instead of taking public transportation.  
A. work      B. to work      C. working      D. to working

34. We practiced speaking Spanish with native speakers \_\_\_\_\_ our fluency.  
A. to improving      B. improve      C. to improve      D. improving

35. I miss \_\_\_\_\_ long conversations with my grandmother; she always gave the best advice.  
A. to have      B. to having      C. having      D. have

36. He stopped \_\_\_\_\_ after realizing how it affected his health and fitness.  
A. smoking      B. to smoke      C. to smoking      D. smoke

37. They continued working through the night \_\_\_\_\_ the urgent deadline.  
A. to meet      B. meet      C. meetting      D. to meetting

38. She attempted \_\_\_\_\_ with her estranged sister after many years of silence.  
A. reconciling      B. to reconciling      C. reconcile      D. to reconcile

39. We agreed \_\_\_\_\_ the costs of repairing the damaged fence between our properties.  
A. share      B. to share      C. sharing      D. to sharing

40. I enjoy listening to podcasts while commuting \_\_\_\_\_ every morning.  
A. work      B. to work      C. working      D. to working

41. He mentioned wanting \_\_\_\_\_ his own business after gaining more experience.  
A. starting      B. to starting      C. start      D. to start

42. They reported \_\_\_\_\_ unusual lights in the sky during their camping trip.  
A. to seeing      B. see      C. seeing      D. to see

43. She hesitated \_\_\_\_\_ the job offer without knowing all the terms and conditions.  
A. to accept      B. accept      C. to accepting      D. accepting

44. We started learning Japanese because we're planning \_\_\_\_\_ Tokyo next year.  
A. to visiting      B. to visit      C. visiting      D. visit

45. I dislike having \_\_\_\_\_ instructions to people who don't pay attention.  
A. repeating      B. repeat      C. to repeat      D. to repeating

46. He remembered \_\_\_\_\_ extra batteries for the camera this time.  
A. to bringing      B. bring      C. bringing      D. to bring

47. They suggested \_\_\_\_\_ the annual conference online instead of in person.  
A. hold      B. to hold      C. to holding      D. holding

48. She promised \_\_\_\_\_ the borrowed equipment by the end of the week.  
A. to return      B. to returning      C. returning      D. return

49. We considered \_\_\_\_\_ the wedding due to unforeseen circumstances.  
A. postponing      B. postpone      C. to postponing      D. to postpone

50. I can't imagine \_\_\_\_\_ without access to the internet in today's digital world.  
A. to live      B. live      C. to living      D. living

## LISTENING 1

1. Tom is working on a project about famous inventors.
2. Sarah designed a special bottle holder for backpacks.
3. Tom's first design of the bottle holder worked perfectly.
4. Tom tested his improved bottle holder with five friends.
5. Tom is currently working on an app to help students remember homework.
6. Sarah believes that only professional engineers can be inventors.

## LISTENING 2

1. Emma invented a special \_\_\_\_\_ system.

2. Emma's invention can water plants for up to \_\_\_\_\_ weeks.
3. Carlos created a mobile app to help his grandmother remember when to take her \_\_\_\_\_.
4. Carlos's first version of the app just made a \_\_\_\_\_.
5. Lin got her idea for special shoes while watching a nature show about \_\_\_\_\_.
6. Lin designed shoes that close without \_\_\_\_\_ for her younger brother.

### LISTENING 3

1. Spencer Silver was trying to create a weak glue when he invented the sticky note.
2. The sticky note was immediately successful after its invention.
3. Percy Spencer discovered the cooking potential of microwaves when his chocolate bar melted.
4. The first microwave oven was small and affordable.
5. The first bicycle had pedals on the front wheel.
6. The "safety bicycle" invented in the 1880s had wheels of different sizes.