

1. Read the text. Use the word in capitals to form a word that completes the gap.

**Steel that doesn't rust**

Harry Brearley, the son of a Sheffield steel smelter, left school at 12 to go to work in one of the city's steelworks. He was an \_\_\_\_\_ (**AMBITION**) chap and started to study metallurgy at home and in evening classes. He \_\_\_\_\_ (**GRADUAL**) built a reputation for expertise, and still in his 30s was chosen to run a new \_\_\_\_\_ (**SEARCH**) facility funded by two of Sheffield's largest steel companies. In 1912, he was tasked by a small-arms manufacturer to find a material that could \_\_\_\_\_ (**EXTENSION**) the life of their gun barrels. He set out to find erosion-resistant steel but found corrosion-resistant steel instead.

The story goes that in 1913 he threw out some \_\_\_\_\_ (**EXPERIMENT**) steel made of 12.8 per cent chromium and 0.24 per cent carbon. A few weeks later, he found it in the yard still \_\_\_\_\_ (**SHINE**) as new. This apparently serendipitous discovery led to the \_\_\_\_\_ (**TRANSFORM**) of the already established cutlery industry in Sheffield. Stainless steel is now used in everything from \_\_\_\_\_ (**SURGERY**) instruments and turbine blades to architectural cladding.

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1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

**2. Write the missing preposition or verb in the gap. Change the verb form if necessary.**

1. Our car \_\_\_\_\_ down on the motorway. We had to wait for over an hour for the tow truck.
2. Who \_\_\_\_\_ up with the idea of the ball-point pen?
3. You should all be able to sail \_\_\_\_\_ this exam.
4. It suddenly dawned \_\_\_\_\_ me that I had forgotten my wallet at home, so I couldn't pay.
5. Sue dropped \_\_\_\_\_ of university after only a year.
6. The team has put \_\_\_\_\_ a theory which is likely to prove controversial.

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**3. Use the following words to complete the gapped sentences: *know, threaten, freelance, was sacked, was made redundant, artificial.***

/5

1. After 15 years with the company, Sarah \_\_\_\_\_ when her department was restructured. She received a generous severance package, but it was still a shock.
2. The company decided to dismiss Tom because he repeatedly arrived late for work and refused to follow instructions. He \_\_\_\_\_ for gross misconduct.
3. Many artists are now choosing to work \_\_\_\_\_, offering their services to various clients instead of being employed by one company.
4. The rapid development of \_\_\_\_\_ intelligence could \_\_\_\_\_ many traditional jobs in the near future, forcing people to adapt to new roles.
5. It's essential to \_\_\_\_\_ your strengths and weaknesses if you want to succeed in a competitive job market.

**4. Complete the sentences with the correct form of the verb.**

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1. The lab assistant accidentally added too much catalyst to the solution, causing an extreme exothermic reaction. If she \_\_\_\_\_ (measure) the volume more precisely, the beaker \_\_\_\_\_ (reach) the boiling point and shattered, causing the evacuation of the lab.
2. During the initial phase of the lunar mission, the primary communications antenna \_\_\_\_\_ (damage) by a micrometeoroid, meaning the ground crew \_\_\_\_\_ (receive) the crucial telemetry data from the rover.
3. The atmosphere in the bioreactor is currently hypoxic, and the technician is concerned because the microbial colony \_\_\_\_\_ (deplete) its oxygen supply for the last forty-eight hours, resulting in noticeably stunted growth.
4. The team was unable to publish their initial findings on the anomaly because, by the time the peer review process began, a competitor's research group \_\_\_\_\_ (collect+ already) similar data from their own deep-space telescope.
5. The historical records suggest that the ancient ritual must \_\_\_\_\_ (perform) by the priests for decades before the empire's collapse.

6. By the end of the next fiscal quarter, the bio-engineering team \_\_\_\_\_ successfully \_\_\_\_\_ the novel protein complex for the clinical trials. (synthesize)

**5. Circle the correct option A/B/C /5**

1. If the pH level \_\_\_\_\_ below 5.5, the enzyme \_\_\_\_\_ its reaction rate until it \_\_\_\_\_ completely denatured.
- A. will drop /reduces /gets                      B. drops /will reduce /gets  
C. is dropping /reduces/ will get              D. drops /reduces/ will get

2. The CEO was reportedly furious when the company's financial report was leaked to the press, **so she immediately arranged to have a thorough security audit carried out.**

Which option correctly replaces the **bolded phrase** while maintaining the original meaning and grammatical structure?

- A. arranged for the security audit to carry out                      C. arranged a thorough security audit to be carried out  
B. had carried out the security audit                      D. caused a thorough security audit being carried out
3. When I was a new apprentice, the supervisor was very strict; we \_\_\_\_\_ manually log every single task we performed.
- A. must              B. didn't have to              C. had to              D. could
4. Due to the toxicity of the radioactive isotopes, the lead physicist had to \_\_\_\_\_ the lab technicians \_\_\_\_\_ the initial calibration procedures using the remote manipulator arms.
- A) got / calibrating    B) have / calibrate  
C) get / calibrated    D) get / to calibrate
5. The research team realized their entire calculation model was compromised because the initial data set, which \_\_\_\_\_ by the junior analysts the previous day, contained a significant error in the handling of outliers.
- A. was being verified                      B. had verified  
C. has been verified                      D. had been verified

