

# Design & Technology

## AQA GCSE

# Industry

### Materials required for questions

---

- Pencil
- Rubber
- Calculator

### Instructions

---

- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- For the multiple choice questions, circle your answer

### Advice

---

- Marks for each question are in brackets
- Read each question fully
- Try to answer every question
- Don't spend too much time on one question

# Good luck!

**Q1.** How can automation improve efficiency in the workplace?

- A** By reducing the need for human movement
- B** By eliminating all human jobs
- C** By making workplaces smaller

**Q2.** What is a benefit of remote work technology?

- A** It makes communication more difficult
- B** It increases the need for in-person meetings
- C** It reduces the need for physical office space

**Q3.** How can technology improve workplace safety?

- A** By monitoring worker fatigue and alertness
- B** By increasing workload expectations
- C** By removing all manual labour

**Q4.** How can smart infrastructure improve building efficiency?

- A** By increasing the number of office workers
- B** By using sensors to optimise energy use
- C** By limiting the use of technology

**Q5.** What is an advantage of modular construction?

- A** It requires traditional brick-and-mortar methods
- B** It increases the cost of construction
- C** It allows buildings to be assembled quicker

**Q6.** Why are sustainable materials being used in modern buildings?

- A** They make buildings more expensive to construct
- B** They are often stronger and more environmentally friendly
- C** They require more maintenance than traditional materials

**Q7.** What is the purpose of collaborative robots (cobots)?

- A** To work alongside humans safely
- B** To fully replace human workers
- C** To increase production costs

**Q8.** How can wearable technology, such as exoskeletons, benefit workers?

- A** By reducing fatigue and physical strain
- B** By making tasks more complex
- C** By increasing the risk of injury

**Q9.** Outline the negative effects mass-production has had on employment **(4 marks)**

---

---

---

---

**Q10.** Many products are mass produced nowadays. Explain two benefits that mass production has had on employment. **(6 marks)**

---

---

---

---

---

---

---

---

## Answers

**Q1.** A

**Q2.** C

**Q3.** A

**Q4.** B

**Q5.** C

**Q6.** B

**Q7.** A

**Q8.** A

**Q9.**

- Workers replaced by machines (1)
- Low job satisfaction/ morale/ self-pride in the work (1)
- Low wages (1) • Poor quality living conditions/ poverty (1)
- Sweatshop employment/ long hours/ few breaks (women/children) (1)
- Poor/ unsafe/ bad working conditions (1)
- Uprisings/ strikes/ friction/ resentment (1)
- Unemployment/ less employment/ less demand for labour (1)

**Q10.**

- Creates more jobs (1) giving employees a regular income/higher pay (1) increasing their quality of life. (1)
- Employers need skills (1) so employees are trained up (1) leading to greater job satisfaction/promotion (1)
- Established a need for health and safety laws (1) which were brought in by the government (1) making the work environment a safer place (1)
- Trade unions established (1) increasing the influence/power of employees (1) bringing many employee benefits (sick pay, holidays, pensions etc.) (1)