

# Design & Technology

## A-Level

# Health and safety laws, regulations and impacts on the designing and making process

### Materials required for questions

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- Pencil
- Rubber
- Calculator

### Instructions

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- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- Use a cross in the box to mark you answer



### Advice

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- 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.** What does this warning symbol mean? – self



- A** Hazardous product
- B** Corrosive
- C** Dangerous for the environment

☐☐☐

**Q2.** What does this warning symbol mean? – self



- A** Corrosive
- B** Flammable
- C** Toxic

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**Q3.** Which symbol indicates a chemical that should be used in a fume cupboard? - bitesize

**A**

☐

**B**

☐

**C**

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**Q4.** Which of these is NOT an example of personal protective equipment (PPE)? – bitesize

**A** Goggles

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**B** Clamps

☐

**C** Chainmail gloves

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**Q5.** Which of these is required by law to ensure safe use of tools, equipment and materials?– bitesize

- A** Risk assessment ☐
- B** COSHH report ☐
- C** PAT testing ☐

**Q6.** Which one of the following statements is true? - bitesize

- A** Safety guards on workshop machinery are not needed when an adult is present. ☐
- B** Quality Control only occurs when the production process is complete. ☐
- C** COSHH regulations control the level of exposure of workers to softwood dust. ☐

**Q7.** Which one of the following statements is false? – self

- A** Manufacturers must follow COSHH regulations ☐
- B** COSHH stands for Control of substances Harmful to health ☐
- C** Safety sign regulations require employees to display an appropriate safety sign wherever a significant risk cannot be avoided or reduced ☐

**Q8.** Quality Control only occurs when the production process is complete. – ocr 2014



**8a.** State the meaning of this symbol. (1 mark)

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**8b.** State 1 safety precaution to be taken when spraying the varnish (1 mark)

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**Q8.** What does the health and safety work act do (1974)? (3 marks)  
– self

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**Q10.** Before any manufacturing processes are carried out a risk assessment must be completed.  
Outline the five steps involved in a risk assessment. **(5 marks)** – edexcel 2016

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5.

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**Q11.** Fill in the missing boxes one has been done for you.  
**(4 marks)** –self

Geometric shape	Meaning	Example of use
 Square	Fire equipment	Fire extinguisher
 Square	Safe condition	<hr/> <hr/>
	Prohibition	No smoking
 Circle	Mandatory action	<hr/> <hr/>
 Equilateral triangle with radiused outer corners		Electricity

## Answers

Q1. A

Q2. C

Q3. A

Q4. B

Q5. A

Q6. C

Q7. B

**Q8a.**

Flammable / Inflammable

Do not accept fire hazard

**8b.**

Wear face mask/respirator/dust mask; use extraction; spray in ventilated area; do not spray near naked flame; spray away from body/eyes

**Q9.**

- Under this Act of parliament, employers are legally required to do all that is reasonably practicable to ensure the health, safety and welfare at work of employees
- This also applies to the health and safety of non-employees such as students and visitors to the school
- The following regulations are procedures to safeguard the risk of injury to people

**Q10.**

Any five of the following points:

1. Identify the hazards / risks (1)
2. Identify the people at risk / who might be harmed. (1)
3. Evaluate the risks / assess the seriousness of it / likelihood of it happening. (1)
4. Decide / implement / check appropriate control measures / an example of a control measure Eg. guards, PPE, signage, training maintenance, etc. (1)
5. Record /store the risk assessment (1)
6. Set a review date / regularly review the risk assessment. (1)






Note that the order of the points should not be considered.

(1 x 5)

**Q11.**

Geometric shape	Meaning	Example of use
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 <p>Square</p>	Fire equipment	Fire extinguisher
 <p>Square</p>	Safe condition	<b>Emergency exit</b>
 <p>Circle with diagonal bar</p>	Prohibition	No smoking
 <p>Circle</p>	Mandatory action	<b>Wear eye protection</b>
 <p>Equilateral triangle with radiused outer corners</p>	<b>Warning</b>	Electricity