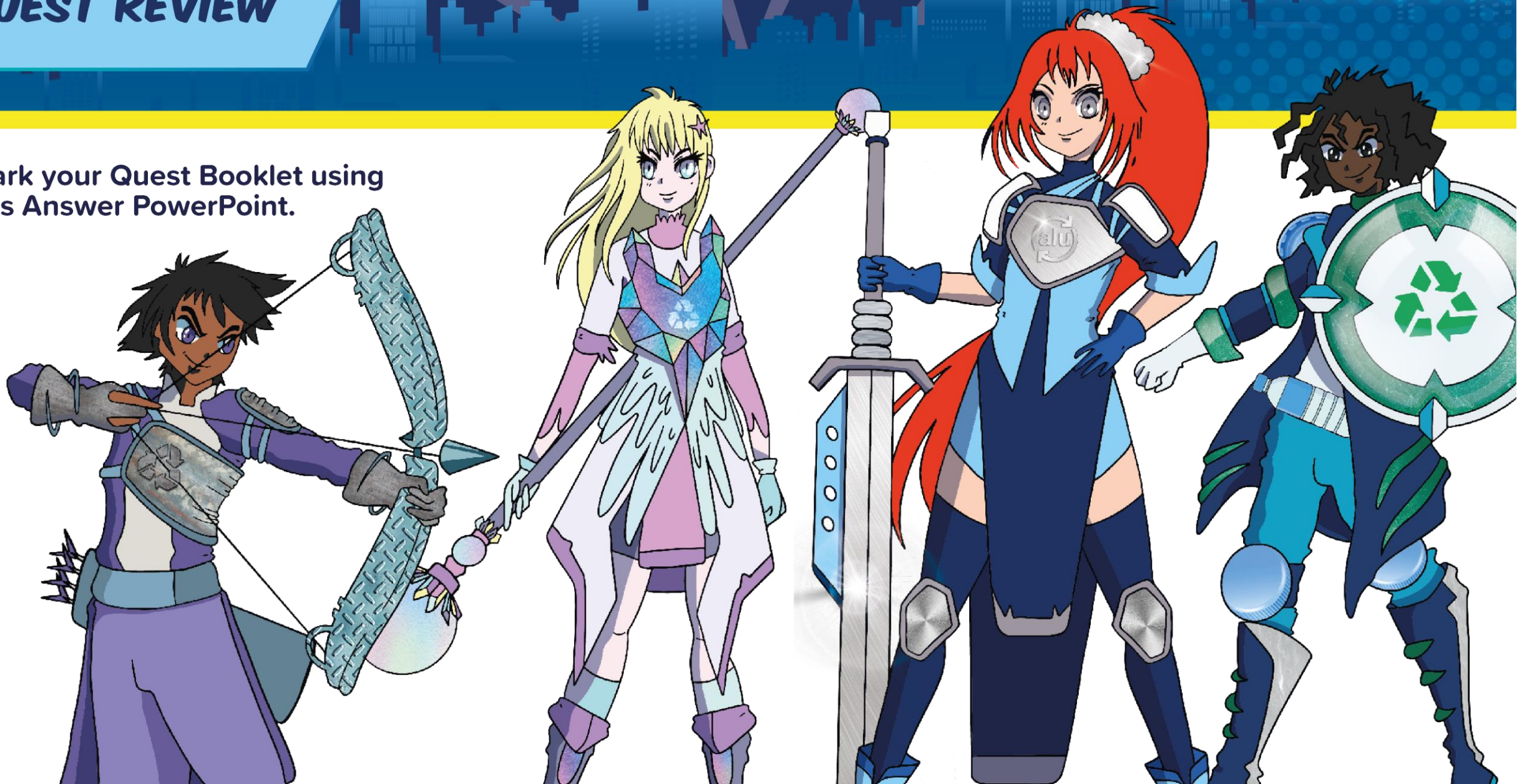


MASTERS OF INFINITY



QUEST REVIEW

Mark your Quest Booklet using
this Answer PowerPoint.



QUEST 1

Swap your answers with another team and mark their work.

IN THE TROLLEY	PACKAGED IN	MADE FROM?	RECYCLABLE? (Y/N/ SOMETIMES)	BUY? (Y/N)	IF NO, SUGGEST AN ALTERNATIVE
CUSTARD	FOOD CAN	STEEL	Y		
PLASTIC CUTLERY	PLASTIC BAG	PP PLASTIC (5)	N		
WHIPPED CREAM	AEROSOL	ALUMINIUM/STEEL	Y		
FIZZY POP	CLEAR PLASTIC BOTTLE	PET PLASTIC (1)	Y		
MAYONNAISE	GLASS JAR	GLASS	Y		
CRISPS	CRISP PACKETS	OTHER PLASTIC (7)	N		
TABLE CLOTH	PLASTIC	PVC PLASTIC (3)	N		
YOGHURTS	PLASTIC POTS	PET PLASTIC (1)	Y		
FIZZY POP	DRINK CANS	STEEL/ALUMINIUM	Y		
FOOD TRAYS	FOIL	ALUMINIUM	Y		
FRUIT	PLASTIC	PVC PLASTIC (3)	N		
BAKED BEANS	FOOD CAN	STEEL	Y		

GIVE A MARK FOR EACH CORRECT ANSWER IN THE 'MADE FROM' AND 'RECYCLABLE' COLUMNS.**MARK __/24**

QUEST 2: TASK 1

Swap your answers with another team and mark their work.

MATERIAL	RECYCLING ONE TONNE SAVES HOW MUCH CO₂ EMISSIONS?	RECYCLING ONE TONNE SAVES HOW MUCH RAW MATERIAL?	RECYCLING SAVES WHAT % OF ENERGY?
ALUMINIUM	9 TONNES	4 TONNES	95%
STEEL	1.5 TONNES	1.4 TONNES	74%
GLASS	0.2 TONNES	1.2 TONNES	25%
PLASTIC	1.5 TONNES	2.2 TONNES	66%

GIVE A MARK FOR EACH CORRECT ANSWER

MARK / 9

QUEST 2: TASK 2

Swap your answers with another team and mark their work.

TOWN	GLASS BOTTLES CO ₂ SAVED	PLASTIC BOTTLES CO ₂ SAVED	ALUMINIUM DRINK CANS CO ₂ SAVED	STEEL FOOD CANS CO ₂ SAVED	TOTAL CO ₂ SAVED	MOST TO LEAST ENERGY SAVED (1 TO 4)
WIGGLESFIELD	0.8	10.5	45	3	59.3	2
BOWLEY	1	4.5	54	4.5	64	1
MINTON	0.4	6	27	7.5	40.9	3
WINHAMPTON	1.2	3	18	9	31.2	4

**GIVE A MARK FOR EACH OF THE CORRECT ANSWERS
(NO MARKS FOR GUESSES WITHOUT CORRECT WORKINGS).**

MARK /24

QUEST 3

Swap your answers with another team and mark their work.

Task 1 – persuade your neighbour **MARK __/5**

Give marks for:

- originality (1 mark)
- reasons to recycle (up to 3 marks)
- memorability (1 mark)

Task 2 – local recycling poster **MARK __/5**

Give marks for:

- accurate information (up to 3 marks)
- presentation (up to 2 marks)



QUEST 4

Swap your answers with another team and mark their work.

Task 1 – match the definition **MARK __/5**

PROPERTY OF MATERIAL	DEFINITION
CORROSION RESISTANT	DOES NOT RUST
DURABLE	LASTS FOR A LONG TIME
MALLEABLE	CAN BE MOULDED INTO DIFFERENT SHAPES
BRITTLE	BREAKS EASLIY
TRANSPARENT	SEE THROUGH

Task 3 – object design **MARK __/5**

- Creative design (2 marks)
- Labelling with properties (3 marks)

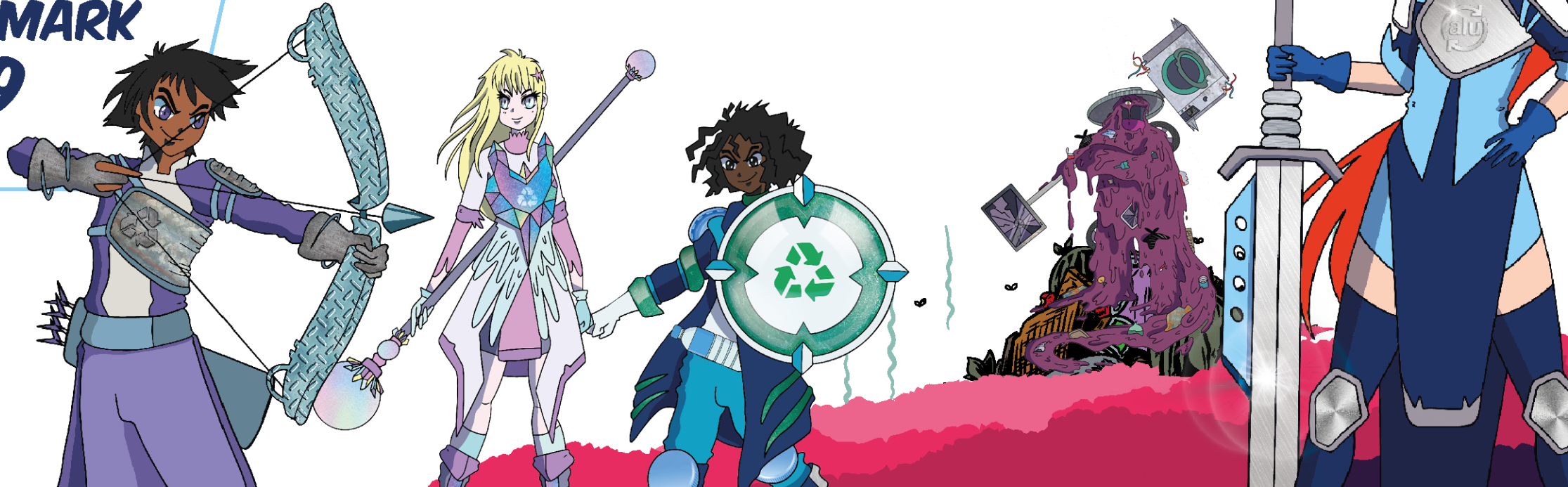
Task 2 – material properties **MARK __/12**

MATERIAL	PROPERTIES	ADVANTAGES	WHAT THEY CAN BE USED FOR
ALUMINIUM	LIGHTWEIGHT, DURABLE, MALLEABLE, CORROSION RESISTANT	HARD AND STRONG BUT ALSO LIGHT, CAN BE TURNED INTO MANY DIFFERENT SHAPES, LASTS FOR A LONG TIME	CARS AND OTHER VEHICLES, CANS AND LIGHTWEIGHT PACKAGING, FOIL
STEEL	STRONG, DURABLE, MALLEABLE, CONDUCTS HEAT	VERY STRONG, LASTS FOR A LONG TIME, CAN BE USED TO MAKE VERY LARGE STRUCTURES OR VEHICLES	VEHICLES, TRAINS, BUILDINGS, CANS
GLASS	HARD, BRITTLE, TRANSPARENT	SEE THROUGH, SO LETS LIGHT IN	WINDOWS, GLASSES, JARS
PLASTIC	LIGHTWEIGHT, DURABLE, MALLEABLE, CORROSION RESISTANT	HARD AND STRONG BUT ALSO LIGHT, CAN BE TURNED INTO MANY DIFFERENT SHAPES, LASTS FOR A LONG TIME	TOYS, BAGS, LOTS OF DIFFERENT PACKAGING, CLOTHING, AND MUCH MORE

QUEST CHAMPIONS

You have all battled hard to defeat Land Phil!
But one team battled harder than all the others...
Count up the team totals:

TOTAL MARK
189



MASTERS OF INFINITY COMPETITION

You have the chance to enter our manga comic strip competition to win an iPad for yourself and a £/€1,500 voucher for your school (from their chosen outlet).

All you need to do is complete this comic strip, to show the journey an aluminium drink can goes on when it is placed in the recycling bin.

SUCCESS CRITERIA

- Show how the drink can is turned into one or more different objects. These could be packaging, or something much more creative.
- Consider the properties of aluminum that would make different objects work.
- Include one or more amazing facts about recycling aluminium.
- Be creative with your manga-inspired drawing style.



I WONDER
WHAT I WILL BE
TRANSFORMED
INTO NEXT?

TO BE CONTINUED...

**'CONGRATULATIONS!
YOU ARE NOW A
MASTER OF INFINITY!
LET'S CONTINUE OUR
QUEST TO RECYCLE...'**