

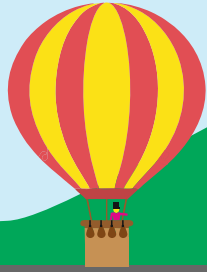
INSTRUCTIONS

Click on the mode of transport, for a link to helpful information. Place an 'X' alongside each 'mode', as you complete each exercise.

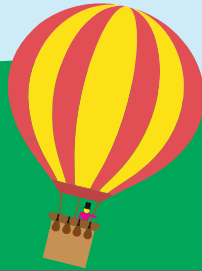
FORCES, MOVEMENT, LEVERS - INTERACTIVE KNOWLEDGE MAP

WORLD ASSOCIATION OF TECHNOLOGY TEACHERS <https://www.facebook.com/groups/254963448192823/> www.technologystudent.com © 2020 V.Ryan © 2020

1. WHAT IS A STATIC LOAD?
Include a sketch.



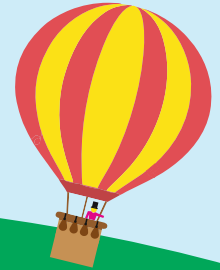
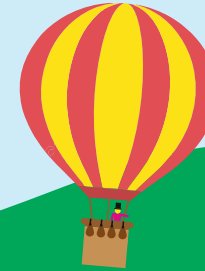
2. WHAT IS A DYNAMIC LOAD?
Include a sketch.



3. DESCRIBE A PRACTICAL APPLICATION OF INTERNAL RESISTANCE



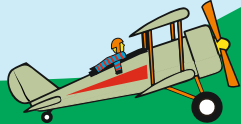
4. WHAT IS THE DIFFERENCE BETWEEN TENSION & COMPRESSION?



5. HOW DOES TORSION AND SHEAR FORCE DIFFER?
Include labelled diagrams



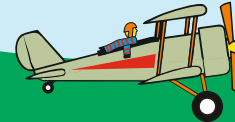
6. STRUTS AND TIES PLAY A ROLE IN THIS PLANE.
WHAT ARE STRUTS AND TIES? (notes and diagrams required)



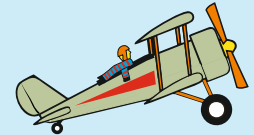
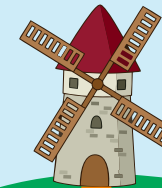
7. WHAT ARE THE FORCES ACTING ON A GIRDER BRIDGE?
Answer with a labelled sketch.



8. WHAT IS POTENTIAL ENERGY? Include a practical example.
Include a sketch / diagram.



9. WHAT IS KINETIC ENERGY? You must describe a practical example.



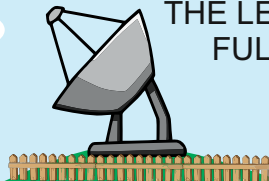
10. WHAT IS AN OBJECTS 'CENTRE OF GRAVITY'?
HOW DO YOU FIND THE CENTRE OF GRAVITY?
Sketches required..



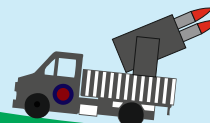
11. WHAT IS THE FUNCTION OF A LEVER?
Include a diagram and make reference to it.



12. DRAW A BRAKE LEVER AND IDENTIFY THE LEVER AND FULCRUM



13. EXPLAIN THE 3 CLASSES OF LEVER.
Include a diagram for each one.



14. FOR EACH CLASS OF LEVER, SKETCH AND DESCRIBE A PRACTICAL APPLICATION



15. HOW DID THE EGYPTIANS USE LEVERS TO HELP THEM BUILD THE PYRAMIDS?

