Year 5: Science Forces & Movement Knowledge Mat

Subjec	ł Specific Vocabulary	Lifting a Load	Important knowledge
friction	Friction is a force, the resistance of motion when one object rubs against another.	Load Effort	☐ I know how gravity makes
accelerate	To increase the speed or rate of an object.		objects fall towards the Earth.
decelerate	To decrease the speed or rate of an object.	Resistance Arm Fulcrum	 I know the effects of air resistance. I know the effects of water resistance.
air resistance	The frictional force air exerts against a moving object.	Pulley System	☐ I know the effect of friction between moving surfaces
surface area	A measurement of all the space that the surface of a three-dimensional shape takes up.		☐ I know that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.
pulley	A simple machine that makes lifting something easier.		☐ I know when variables need to be
lever	A long, sturdy body that rests on a support called a fulcrum. The fulcrum is the place where the lever pivots		controlled and can decide when a comparative or fair test is the best way to answer my question. I know how to write accurate conclusions which match the
load	The load is the object that is being lifted or affected. In a seesaw, whoever is being lifted up is the load.	Effort = L	evidence. I can make suggestions of how to record my results.
water resistance	The frictional force water exerts against a moving object.	Load (L)	 □ I can find relationships in the data that I have collected. □ I know about cause and effect. □ I know which secondary sources
gravity	An invisible force that pulls objects toward each other	<u> </u>	are most useful to research my ideas. I know if my research has answered my question.