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| Lesson 1: Energy and States  | Recommended age group:7 – 11 Years  | Learning Outcomes: Students will: * Be able to explain that some forces require contact, but magnetic forces can act as distance. – Explain and demonstrate how magnets attract and repel and why this doesn’t always happen.
* Have an understanding of more complex forces and how they act in a practical manner.
* Have an understanding of forming a circuit to generate electricity.
 | Suggestions:* Students should recap material that they have previously learnt.
* Try to film or record the progression of your students.
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| Activity  | Description  | Objectives | Teaching points  | Differentiation  |
| Magnetise game | This game looks at the forces of magnets through a game. It allows students to react to instruction quickly and creatively. A safe and fun way to warm up students.  |
| Task 1: Magnetic Waves | Ask the students to pair up and face each other. Get students to experiment with facing each other and repelling and attracting to each other. This is an introduction to contact work and experimenting on the spot with a partner. Students break off to work on their own, experimenting with their body being a magnet and the space around them being a magnet too.  | * Embody the qualities of the magnets
* Introduce contact work
* Focus on performance quality of each movement.
 | * Encourage students to be as creative as possible.
* Mimicking the actions of magnets as closely as possible.
* We suggest that you demonstrate with magnets the attract and repel forces as this could be a great visual representation.
 |  🡹 Try this task in larger groups, transferring where the magnetic force is located. For example: three student’s hands and feet are attract and three students core are repel. See what shapes can be created. 🡻 Break down the movement experiment with attract first and then introduce repel.  |
| Task 2: Magnetic Duet  | Break the students into pairs and ask them to follow the instruction provided in the film, or, guide the students through these instructions in your own time. Based on the experimentation- students should prepare a duet, made up of 4 ‘attract’ and 4 ‘repel’ movements.  | * Get students to create a duet working together to decide on their 8 movements.
* Vary dynamics.
 | * Guide the students to vary their movement choices.
* Get them to explore a variety of levels and to challenge themselves.
 | 🡹 Create a longer phrase than 8 movements. Extend the phrase to 10-15 movements with different levels. 🡻 Make the sequence shorter.  |
| Task 3: Elastic Band  | Using the elastic, get your students to experiment with the resistance of the band in a circle. Form a tight circle and then walk as far back as possible and let go. Using the elastic band, make creative shapes using the band and its resistance. Ask a/several students to stand out and once a new creative shape has been made, then students should weave in and out of the shapes.Take away the elastic and do the same task, see how this changes the dynamic and try to keep the resistance the same.  | * Understand potential and kinetic energy through the physical use of an elastic band.
* Familiarise students with weaving in and out of shapes
* Interact with others in space.
 | * Encourage the students to be as creative as possible with the shapes they create and most of all have fun!
* Ensure that students don’t wrap the elastic around wrists etc. Elastic should be grasped by their hands.
* Resource required: Large elastic band
 | 🡹 Have several students weaving in and out of the shapes at the same time. Alternatively, shorten the elastic so the creative shapes are a lot tighter and challenging to weave between. 🡻 Keep practising this task with the elastic until the students are comfortable with the movement.  |
| Task 4: Energy sequence  | This task is a sequence incorporating all the movements explored so far. This is Karl teaching a movement phrase. Students should follow and learn the movement.  | * Students learn to follow and replicate movement accurately.
 | * Encourage movement qualities and performance skills.
* Get students to really feel the forces that they are trying to replicate through movement.
 | 🡹 Repeat a section of the piece and ask the students to adapt it changing the facing or levels etc. 🡻 Learn the piece section by section ensure that each piece is perfected first.  |

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| Assessment: What are we looking for?  | Things to consider:  | Inclusion:  | Discussion & appreciation:  |
| * Strong understanding of the characteristics of a magnet
* Understanding of forces- demonstrated through elastic task.
* Keeping focus and concentration throughout.
* Strong attention to detail
* Being aware of others in the space.
 | * Students may feel self-conscious when initially beginning tasks. Try creation in groups before students create individually or in duets.
* Reiterate that when creating there is no right or wrong answer.
* Try playing different music to help the dynamic range of ideas.
 | * All tasks are easily adaptable to suit everyone’s needs.
* Introduce and conclude classes with the learning outcomes provided.
* Allow students to ask questions throughout the process.
* Open up opportunities for students to feedback to each other.
 | Ask students how they felt after tasks, what did they like, what would they like to change when creating in that method in the future. Always present work to the class, have a look at what others have come up with and feedback on this positively.  |
| Cross Curricular Links: | SMSC:  | Risk Assessment:  |
| **Science:** * Understanding how magnets attract or repel materials.
* Identifying that magnets have two poles
* Construct circuits that are built to generate electricity.

**Dance:** * Explore different movement patterns.
* Develop balance, agility and co-ordination.
* Perform dances using a range of movement patterns.
* Make actions and sequences of movement.
* Develop flexibility, strength technique, control and balance.
 | * Building relationships in duet and group tasks.
* Inviting positive feedback and encouragement.
 | * Ensure the space is clear with equipment to the side of the room.
* If your class is big, break it down into smaller groups when you can.
* Ensure your students have had a thorough warm-up before partaking in any movement.
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