Visual impairment:

Level 2:

1. Hurricane simulator - A freestanding booth where visitors can experience the force of high wind speeds, up to 97.2 km/h. Intended to highlight that wind contains a lot of potential energy.
2. Hydro wall – a series of activities including a wave machine and a pelton water wheel highlighting the power of water.
3. Fundamentals wall – the fundamentals wall contains a series of displays containing information about various forms of power.

Hearing impairment:

1. Hurricane simulator - A freestanding booth where visitors can experience the force of high wind speeds, up to 97.2 km/h. Intended to highlight that wind contains a lot of potential energy.
2. Hydro wall – a series of activities including a wave machine and a pelton water wheel highlighting the power of water.

3. Hand Crank Scalextric - A full size Scalextric racetrack where visitors can power up to 4 slot cars by turning hand crank generators positioned around the outside of the track. There is a lap counter in the middle of the circuit. Intended to highlight that kinetic energy from your body can be converted to electricity to power model cars.

Physical impairment:

1. Nuclear energy area – a series of activities and displays on nuclear energy, including a chain reaction demonstrator.
2. Fundamentals wall – the fundamentals wall contains a series of displays containing information about various forms of power.
3. Hand Crank Scalextric - A full size Scalextric racetrack where visitors can power up to 4 slot cars by turning hand crank generators positioned around the outside of the track. There is a lap counter in the middle of the circuit. Intended to highlight that kinetic energy from your body can be converted to electricity to power model cars.

Autism:

1. Energy footprint – measure your carbon footprint using this interactive display quiz.
2. Hydro wall – a series of activities including a wave machine and a pelton water wheel highlighting the power of water.
3. Hand Crank Scalextric - A full size Scalextric racetrack where visitors can power up to 4 slot cars by turning hand crank generators positioned around the outside of the track. There is a lap counter in the middle of the circuit. Intended to highlight that kinetic energy from your body can be converted to electricity to power model cars.

Visual impairment:

1. Sensory homunculus - A ‘homunculus’ sculpture that illustrates a touch sensory map of your brain. The sculpture shows you which parts of your skin send most signals to your brain from the touch receptors of your skin. The bigger the body part on the sculpture, the more of your brain is devoted to receiving signals from that body part. The sculpture is sitting on two large steps and welcomes visitors to the exhibition.
2. Sensory walls and seat - Two walls of sensory stimuli for visitors to explore with touch and sight. One wall is free-standing and connected to a seat. The touch stimuli are designed to make it easy to compare the sensitivity of fingers versus elbows. These quick-interaction exhibits are designed to encourage visitors to use their senses to explore and think about their bodies (to then investigate the rest of the exhibition).
3. Whose brain is more relaxed? - An exhibit that allows two visitors to compete to be the most relaxed. It consists of a table, magnetic ball, two headbands containing EEG sensors, screen, start button, 3-layer flapper label and two moveable stools. The headband sensors measure the brainwaves of each visitor and compare them to calculate who appears more relaxed. The measurements are shown on screen and affect the position of the magnetic ball, which can move in a straight line between the visitors on the table. The ball is moved by a computer-controlled magnet under the table.

Hearing impairment:

1. Bendy Microscope - A wall-mounted exhibit that allows visitors to view and record images of their skin from a hand-held microscope. It consists of a video microscope, touchscreen and barcode scanner. The microscope is attached to the wall by flexible tubing and sits in a cradle when not in use.
2. Virtual autopsy - An exhibit that allows visitors to explore the inside of three humans through medical visualisation tools. It consists of a 55” multitouch screen mounted at an angle against a wall. The scans were taken of real people using Computed Tomography (CT) technology.
3. How fast can you sprint - A sprint track that visitors use to measure the time it takes them to travel the 5-metre distance between the start and finish line. It consists of one lane of athletics-grade matting, a vertical crash mat at the end, a barrier along the side, touchscreen at start, display screen above crash mat, results touchscreen beside crash mat, speaker and two barcode scanners. The results are taken by two light gates and a video camera above the sprint track.
4. Heart ECG - A table-top exhibit with seat that allows visitors to measure and record the electricity of their heart. It consists of an armchair, touchscreen, barcode scanner, and a wall-graphic about the heart. The armchair has three metal sensors: a flat sensor where the visitor sits and a ‘dome’ sensor on each armrest.

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