**Pre-Parabola 0**

* Sensor up (Ideally pre-flight)
* Remove long straps (main pocket of bag)
* Remove short straps (front pocket of bag)
* Attach bungees
* Turn on Power adapter (Red / Red / Red)
* Turn on treadmill power
* Turn on camera
* Turn on Tablet
* Get into position for Parabola 0
* Turn on X-sens sensors

**Post Flight**

* Disconnect sensors on tablet
* Turn off Tablet
* Turn off sensors
* Turn off Treadmill
* Turn off Power supply
* Turn off camera
* Bungee cords back in backpack
* Attach short straps
* Attach long straps

**Experimenter instructions**

**Parabola 0**

**Parabola 1**

Level Flight Get on treadmill

Attach Bungees

Attach Safety cord

Injection Practice sitting standing

Assess bungee weight in Zero G

20 Sit down

Level flight Assign sensors

Treadmill to speed

**Parabola 2-30**

Level Flight Confirm Next Protocol

Adjust treadmill if needed

40 Turn on TalTech sensor

Injection Complete activity

20 Sit Down

Turn off TalTech Sensor

**Operator instructions**

**Parabola 0**

**Parabola 1**

Level Flight Help attach bungees

Injection

Level flight Assign sensors

**Parabola 2-30**

Level Flight Go to **“Set up”** tab

* Check right experimenter assigned
* Check sensors still attached
* Check both sensors still orange

Go to **“Measure”** Tab

Select **“Start measuring”**

**Confirm next protocol (Verbal)**

Type in the Parabola code

40 Select **“Start experiment”**

20 Once experimenter sat down

Select **“Stop measuring”**

Protocol for longer breaks

**Between blocks**

Level flight Unhook experimenter

Prep tablet for next parabola

**Discuss any contingencies**

1 Min Re-attach bungees

Commence parabola set up

**Parabolas**

**Block 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parabola** | **Code** | **Activity** | **Footwear** |
| **0** |  | **Sit** | **Shoes** |
| **1** |  | **Practice** | **Shoes** |
| **2** | **SW2** | **Walk** – speed 5 | **Shoes** |
| **3** | **SW3** | **Walk** – speed 5 | **Shoes** |
| **4** | **SW4** | **Walk** – speed 5 | **Shoes** |
| **5** | **SW5** | **Walk** – speed 5 | **Shoes** |
|  |  | **5 Min break** |  |

**Block 2**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parabola** | **Code** | **Activity** | **Footwear** |
| **6** | **SR6** | **Run –** Speed 8 | **Shoes** |
| **7** | **SR7** | **Run –** Speed 8 | **Shoes** |
| **8** | **SR8** | **Run –** Speed 8 | **Shoes** |
| **9** | **SR9** | **Run –** Speed 8 | **Shoes** |
| **10** | **SJ10** | **Jump** – speed 0 | **Shoes** |
|  |  | **5 Min break** |  |

**Block 3**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parabola** | **Code** | **Activity** | **Footwear** |
| **11** | **SJ11** | **Jump** – speed 0 | **Shoes** |
| **12** | **SJ12** | **Jump** – speed 0 | **Shoes** |
| **13** | **??13** | **Contingency / walk** | **Shoes** |
| **14** | **??14** | **Contingency / walk** | **Shoes** |
| **15** | **??15** | **Contingency / walk** | **Shoes** |
|  |  | **8 Min break** |  |

**REMOVE SHOES**

**Block 4**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parabola** | **Code** | **Activity** | **Footwear** |
| **16** | **BW16** | **Walk** – speed 5 | **Barefoot** |
| **17** | **BW17** | **Walk** – speed 5 | **Barefoot** |
| **18** | **BW18** | **Walk** – speed 5 | **Barefoot** |
| **19** | **BW19** | **Walk** – speed 5 | **Barefoot** |
| **20** | **BR20** | **Run** – speed 8 | **Barefoot** |

**Block 5**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parabola** | **Code** | **Activity** | **Footwear** |
| **21** | **BR21** | **Run** – speed 8 | **Barefoot** |
| **22** | **BR22** | **Run** – speed 8 | **Barefoot** |
| **23** | **BR23** | **Run** – speed 8 | **Barefoot** |
| **24** | **BJ24** | **Jump** – speed 0 | **Barefoot** |
| **25** | **BJ25** | **Jump** – speed 0 | **Barefoot** |

**Block 6**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parabola** | **Code** | **Activity** | **Footwear** |
| **26** | **BJ26** | **Jump** – speed 0 | **Barefoot** |
| **27** | **??27** | **Contingency / walk** | **Barefoot** |
| **28** | **??28** | **Contingency / walk** | **Barefoot** |
| **29** | **??29** | **Contingency / walk** | **Barefoot** |
| **30** | **??20** | **Contingency / walk** | **Barefoot** |