**Scenario: Windy Criminal**

A known criminal has been spotted walking around Bristol Broadmead during prime Saturday shopping hours. Police want to follow the criminal without being noticed in order to collect evidence. They have deployed their new surveillance drone but it’s so windy that the drone is finding it hard to stay in the right place.

***We want you to design the best drone for the job by adding some bio-inspired upgrades!***

Allowances

Weight allowance 5 kg

Power allowance 50 W

Money allowance £500

Things to think about:

* Do not crash! Civilians might get hurt
* Photos or videos of the criminal are required by the police
* The lighter the drone, the longer the drone can fly and more time to collect evidence
* Power not used by the upgrades can be used to fly the drone for longer
* Do not exceed your money budget
* The name of the game is stealth, don’t get spotted by the criminal or it will be difficult to gather evidence

Fill in the table below with your sensor combinations and circle the final choice

|  |  |  |  |
| --- | --- | --- | --- |
| Upgrades | Weight (Kg) | Power (W) | Cost (£) |
| *Example* GPS, IMU, Camera | 0.5 + 0.5 + 1 = 2 | 5 + 5 + 15 = 25 | 50 + 50 + 100 = 200 |
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Game instructions:

*Fly the drone from the police station to the location of the criminal and try to hover there.*

*Watch out for the gusts!*

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