**Scenario: Urgent Delivery!**

Timmy has been waiting for a new kidney, and today an organ donor has become available at another hospital. The kidney needs to arrive quickly but there is a huge traffic jam due to rush hour. The hospital deploys its brand new delivery drone, can you help the drone to navigate to the hospital in record time?

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

Allowances

Weight allowance 10 kg (6 kg package with kidney)

Power allowance 50 W

Money allowance £400

Things to think about:

* If the drone arrives in 5 min, Timmy has a survival chance of 99%
* If the drone arrives in 10 min, Timmy has a survival chance of under 50%
* The lighter the drone, the faster the drone can fly
* Power not used by the upgrades can be used to fly the drone faster
* Do not exceed your money budget
* Do not drop the package!!!!

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

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

*Fly the drone from Southmead hospital to the Children’s Hospital, avoid the buildings and don’t get stuck under the bridge.*

*Remember Timmy needs his new kidney so make sure to get it to him quickly and in one piece!*