**Homework Menu Grid- Genetics and evolution**

Complete some of the tasks from the grid below to reach a total of points over this unit of work. Try and cover a variety of tasks over the unit so that you’re practising different skills. Once you’ve completed a task, colour that box on the grid to keep a record of your points. Can you get the highest point score this unit?

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| **Topic** | **1 Point** | **2 Points** | **4 Points** | **6 Points** | **10 Points** |
| **Variation**  | Describe what variation is.  | Draw a Venn diagram to show examples of environmental variation, inherited variation and examples of both.  |  |  | Write a speech explaining the importance of variation between organisms.  |
| **Genetic information**  | Write an old-style tweet that describes the function of a sperm cell (140 characters) | Draw labelled diagrams of a sperm cell and egg cell.  | What is fertilisation. Draw a diagram to show what happens.  | Write a definition of a sperm cell. Explain how sperm cells and cells are adapted for their function.  | Make a model of a sperm cell using whatever resources you have. Find a way to label each part and describe what it does. |
| **The differences between species**  | Write a checklist for things a woman should avoid during pregnancy.  | Draw a flow map to show the stages of childbirth.  | Draw a timeline to show the stages of pregnancy from fertilisation to childbirth.  | Research and produce an information leaflet about midwifery. Include information such as the job involves, what qualification you need and the average salary.  | Research fertility clinics. Why are they used and how may be conceive a child through IVF treatment?  |
| **Competition and adaptations**  | Describe what the menstrual cycle.  | Write a letter to a girl who is concerned about the menstrual cycle.  | Draw a timeline to show the stages of the menstrual cycle.  | Make a comic strip to show the different stages of the menstrual cycle.  | Write an information leaflet describing different forms of contraception and how they work for a doctor’s surgery.  |

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| **Evolution** | Write a definition of variation. Why is variation so important?  | Write definitions of continuous and discontinuous variation. Give examples of each. | Design an experiment to investigate how height varies in year 7 students. Include a hypothesis, a step-by step method, an equipment list and a results table.  | Write two exam questions based reproduction and variation. At least one question should be worth three or more marks. Produce a mark scheme for your questions. | Research inherited and environmental variation. Draw a Venn diagram to show examples of inherited variation, Explain how some types of variation are both inherited and environmental.  |
| **Extinction**  | Write an old style tweet (140 characters) that describes what pollination is.  | Write a list of all of the keywords you have used in this topic, along with their definitions. Make sure you learn them! | Draw a labelled diagram of a flower.  | Research what is happening to populations of bees. Explain he impact on this on food supply.  | Find a flower outside. Using tweezers and scissors dissect the parts and place them on a blank piece of paper. Label each part. Take a photo of your dissected flower to show your class teacher.  |
| **Preserving biodiversity**  | Describe what seed dispersal is.  | Explain why seed dispersal is so important for the survival of plants.  | Describe three examples pf wind pollinated plants, and three examples of incest pollinated plants.  | Compare and contrast insect pollinated plants and wind pollinated plants.  | Write a revision quiz for the whole of this unit. There must be at least 10 questions. You must include a mark scheme with the answers.  |