**Primary Schools:  
Sweet DNA**

Approximate timing: 40 mins

Required resources: PowerPoint presentation, lesson plan, fact sheet, long sweets, soft sweets (with four colours), cocktail sticks

Summary: This lesson will introduce students to what DNA is, why we want to know about it, and how to make a model of DNA using sweets.

**The lesson supports:**

*Primary Curriculum – working scientifically*

Pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

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| **Learning outcomes** | |
| All students will: | Be able to draw the double-helix structure of DNA |
| Most students will: | Be able to explain what DNA is |
| Some students will: | Be able to list what DNA does, where it was discovered, and why scientists do research around DNA |
| Key word/s | DNA, experiment, structure, genetics |

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| **Teaching notes** | **Student learning activities** |
| **Starter** (5 mins)  Identify students’ existing knowledge  Teacher asking questions to students individually or in groups:   * Who can tell me something about DNA?   Refer to fact sheet for more questions.  Can split into table discussions where students are shy to answer in front of whole class. Think-pair-share & talking partners. | Slide(s) 1  Student actions  Answer questions about DNA |
| **Development** (15 mins)  Teacher notes  Go over slide content & fact sheet prior to lesson   * Add picture of yourself/famous person for slide 11   Presentation designed in question / answer format: ask questions before showing the answer to help with engagement. | Slide(s) 2-13  Student actions  Listen and answer questions to gauge and add to their existing knowledge around DNA, what it is, what it does etc. |
| **Principal Activity** (15 mins)   * Print out sweet DNA instructions * Provide sweets and cocktail sticks (warn students that the sticks are sharp!) | Slide 14  Develop models of DNA using sweets and cocktail sticks. |
| Plenary (5 mins)  Plenary questions are linked to initial learning outcomes | Slide 15  Students answer questions to assess learning. |
| **Homework/extension activities**  Suggested area of research or follow-up activity | Epigenetics model challenge  DNA extraction from strawberries  [DNA origami](https://www.yourgenome.org/activities/origami-dna)  <https://bbsrc.ukri.org/engagement/schools/keystage3/discovering-dna/>  <https://bbsrc.ukri.org/engagement/schools/> |