

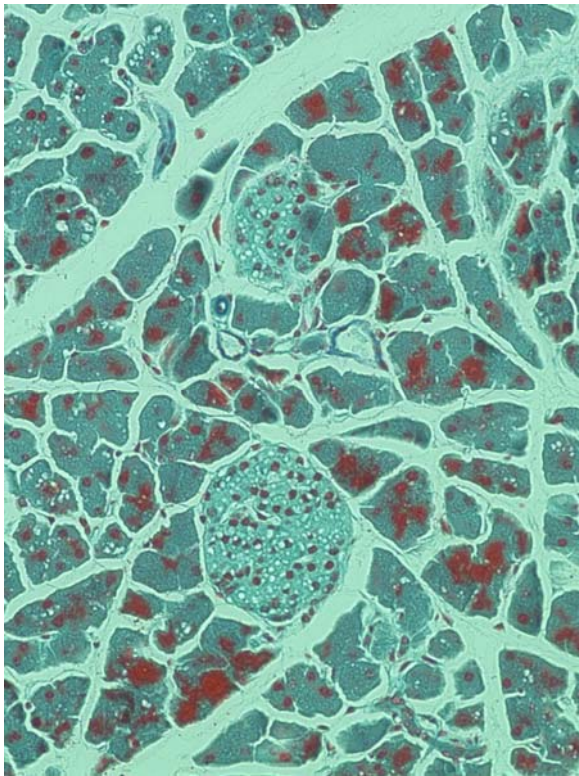
CELLS ONLINE WORKSHEET

TOPIC

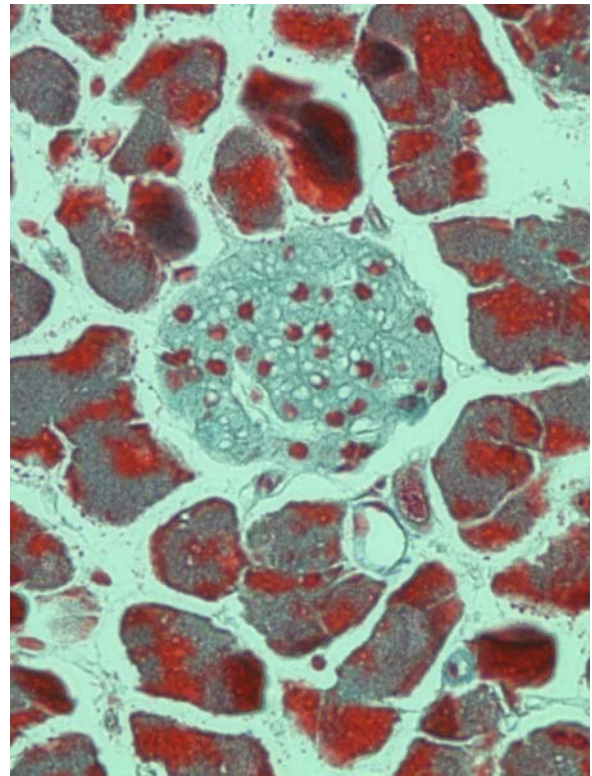
ISLETS OF LANGERHANS

Islets of Langerhans are discrete bundles of cells within the pancreas containing four cell types, including α -cells and β -cells. The photographs show mouse pancreatic tissue treated with a stain called GAF which stains insulin granules in β -cells a blue/green colour while other pancreatic cells are a darker purple/ blue colour. The tissue was viewed at 200x (Slide A) and 400x magnification (Slide B).

SLIDE A



SLIDE B



Download this page, place in your notebook and answer the following questions.

- Q1: How many Islets of Langerhans are present in Slide A? Circle and label them.
- Q2: How many Islets of Langerhans are present in Slide B? Circle and label them.
- Q3: Describe how you can identify the islet as separate from other pancreatic tissue.
- Q4: Find out what hormones are produced by the α -cells and β -cells in islets of Langerhans?