# Unit 2: How is continuity of life maintained?

## Area of Study 1: How does reproduction mainatin the continuity of life?

**Key knowledge**

**Cell growth and cell differentiation**

* + 1. ***the consequences of stem cell differentiation in human prenatal development including the development of germ layers, types of tissues formed from germ layers and the distinction between embryo and foetus***
1. What is stem cell differentiation (aka specialisation)?

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1. What are the germ layers?

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1. Distinguish between diploblastic and triploblastic organisms.

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1. Complete the table identifying the tissues and organs arising from the different germ layers.

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| Tissues and organs arising from germ layers |
| *ectoderm* | ***mesoderm*** | ***endoderm*** |
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1. Identify the structure in the diagram below, the significance of this structure in the development of the embryo and label parts A, B and C

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1. The structure above proceeds to Gastrulation. Define gastrulation.

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The diagram below displays the embryo’s development to implantation.

1. What does the epiblast develop into?

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1. What is the role of the yolk sac?

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1. What is the role of the amnion?

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1. Define organogenesis.

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1. Distinguish between and embryo and a foetus.

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