CREATE AN ALIEN

Single Lesson Plan

Create An Alien

Task:
Prior learning: SCIENCE: Earth and Space Sciences Students work in teams (of 2-3) to research information about the planets in our solar system. Find out about the climate and weather patterns, surface and landforms, what the planet is made of, special features e.g. rings of Saturn. Is there scientific evidence about any of these planets that indicates life has previously existed there?

SCIENCE: Biological Sciences Students work in teams to explore different climates, habitats and environments on Earth. What are the adaptations that living creatures need for survival?

Activity:

Resources:
Task 1: Use the question "If there was life on other planets in our solar system what could it look like?" What could aliens look like? [Think-pair-share] Discuss as a group. Brainstorm features that living creatures have in common e.g. eyes, body, legs, arms, ability to breathe, body covering. Model our own interpretation. Create your own sketch/diagram of what you think an alien life form could look like. Clearly label body parts.

Task 2: Students use: • prior knowledge about the planet they have researched • what they have learnt about the structural features and adaptations of living things on Earth • how living things depend on each other and the environment to survive Students make modifications to their original sketches and designs to include adaptations that their aliens would need to be able to survive on their planet of choice. Include the following information: • Planet of origin • Climate, and weather patterns, surface and landforms, what the planet is made of, special features • Name of alien • Labeled diagram • List of adaptations/structural features and how these features allow your alien to adapt to its planet • How your alien moves and behaves

Task 3: Peer Assessment: Students swap their diagram and information with a partner. Look for evidence that the alien has adaptations that are suited to the planet of origin. Use 2 stars and a wish to feedback to their peers. Students read their feedback and make any modifications necessary.

Task 4: Students create their alien in Makers Empire 3D software (based on their alien sketches). Print 3D aliens using white filament. Decorate with coloured sharpies.
Australian Curriculum:

Making And Recording Observations Of Living Things As They Develop Through Their Life Cycles (ELBS811)

Describing The Stages Of Life Cycles Of Different Living Things Such As Insects, Birds, Frogs And Flowering Plants (ELBS812)

Comparing Life Cycles Of Animals And Plants (ELBS813)

Recognising That Environmental Factors Can Affect Life Cycles Such As Fire And Seed Germination (ELBS814)
link [http://rdf.australiancurriculum.edu.au/elements/2014/0af0f95a-e6a5-4f9d-8f5b-9e4600a2dbb6]

Investigating How Plants Provide Shelter For Animals (ELBS856)
link [http://rdf.australiancurriculum.edu.au/elements/2014/09/0d2f3a6-cd93-42c5-b7c7-9e4600a2dbb6]

Investigating The Roles Of Living Things In A Habitat, For Instance Producers, Consumers Or Decomposers (ELBS807)

Observing And Describing Predator Prey Relationships (ELBS808)
link [http://rdf.australiancurriculum.edu.au/elements/2014/0e63d2f2b-1dd7-4448-a429-9e4600a2dbb6]

Predicting The Effects When Living Things In Feeding Relationships Are Removed Or Die Out In An Area (ELBS809)

Recognising That Interactions Between Living Things May Be Competitive Or Mutually Beneficial (ELBS810)

Living things have life cycles (ACSSU072)

Living things, including plants and animals, depend on each other and the environment to survive (ACSSU073)

Collecting Evidence Of Change From Local Landforms, Rocks Or Fossils (ELBS819)
link [http://rdf.australiancurriculum.edu.au/elements/2014/09/3e9f9ca4-5f09-4e9f-9771-9e4600a2dbb6]

Exploring A Local Area That Has Changed As A Result Of Natural Processes, Such As An Eroded Gully, Sand Dunes Or River Banks (ELBS820)

Investigating The Characteristics Of Soils (ELBS821)

Considering How Different Human Activities Cause Erosion Of The Earth's Surface (ELBS822)

Considering The Effect Of Events Such As Floods And Extreme Weather On The Landscape, Both In Australia And In The Asia Region (ELBS823)
link [http://rdf.australiancurriculum.edu.au/elements/2014/09/9ecf9864-2c77-4b7f-8e0e-9e4400a2dbb6]

Earth's surface changes over time as a result of natural processes and human activity (ACSSU075)

Biological sciences

Earth and space sciences

Exploring Ways In Which Scientists Gather Evidence For Their Ideas And Develop Explanations (ELBS828)

Considering How Scientific Practices Such As Sorting, Classification And Estimation Are Used By Aboriginal And Torres Strait Islander People In Everyday Life (ELBS829)

Science involves making predictions and describing patterns and relationships (ACSHE061)

Investigating How A Range Of People, Such As Clothing Designers, Builders Or Engineers Use Science To Select Appropriate Materials For Their Work (ELBS830)

Considering Methods Of Waste Management And How They Can Affect The Environment (ELBS831)

Considering How Science Has Contributed To A Discussion About An Issue Such As Loss Of Habitat For Living Things Or How Human Activity Has Changed The Local Environment (ELBS832)

Considering How To Minimise The Effects Of Erosion Caused By Human Activity (ELBS833)

Science knowledge helps people to understand the effect of their actions (ACSHE062)
link [http://rdf.australiancurriculum.edu.au/elements/2014/05/2be5951f-fc7c-4b44-a0f4-9e4600a2dbb6]

Nature and development of science
link [http://rdf.australiancurriculum.edu.au/elements/2014/09/8e559e3b-68d0-4c6d-89f4-9e4600a2dbb6]

Use and influence of science

Considering Familiar Situations In Order To Think About Possible Areas For Investigation (ELBS037)
link [http://rdf.australiancurriculum.edu.au/elements/2014/02b0f95a9-8ccf-4304-84c5-9f700ccdad39]

Reflecting On Familiar Situations To Make Predictions With Teacher Guidance (ELBS039)

Choosing Questions To Investigate From A List Of Possibilities (ELBS038)
link [http://rdf.australiancurriculum.edu.au/elements/2014/05/d51f860-5cb5a-45ee-90cc-9f700ccdad39]

With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge (ACSS506)

Exploring Different Ways To Conduct Investigations And Connecting These To The Types Of Questions Asked With Teacher Guidance (ELBS041)
Developing An Understanding Of The Behaviour Of Light By Making Observations Of Its Effects (ELBS868)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/413529ba-bba3-49ef-b40e-9e4600a2dbe5)

Testing Predictions Relating To The Behaviour Of Solids, Liquids And Gases By Conducting Observational Experiments (ELBS867)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/99a43ead-3aaf-4f8c-aecd-9e4600a2dbe5)

Researching How Scientists Were Able To Develop Ideas About The Solar System Through The Gathering Of Evidence Through Space Exploration (ELBS868)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/278a91fd-3e2d-4dd3-84c5-9e4600a2dbe5)

Describing How Scientists From A Range Of Cultures Have Improved Our Understanding Of The Solar System, Such As Copernicus, Khayyám And Galileo (ELBS869)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/cdf9a100-85d5-46ca-9aaa-9e4600a2dbe5)

Researching The Different Types Of Scientists Who Work In Teams In Space Exploration, And Australia's Involvement In Space Exploration (ELBS870)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/6a17b6f0-3a99-4e52-8924-9e4600a2dbe5)

Learning How Aboriginal And Torres Strait Islander Peoples Used Observation Of The Night Sky To Assist With Navigation (ELBS871)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/6b5d0057-80c1-4f0d-ab17-9e4600a2dbe5)

Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHE082)

Important contributions to the advancement of science have been made by people from a range of cultures (ACSHE082)

Investigating How The Development Of Materials Such As Plastics And Synthetic Fabrics Have Led To The Production Of Useful Products (ELBS872)

Describing How Technologies Developed To Aid Space Exploration Have Changed The Way People Live, Work And Communicate (ELBS878)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/29ecf035-8db5-40b0-b647-9e4600a2dbe5)

Exploring Objects And Devices That Include Parts That Involve The Reflection, Absorption Or Refraction Of Light Such As Mirrors, Sunglasses And Prisms (ELBS874)

Considering How Best To Ensure Growth Of Plants (ELBS875)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/3a850532-2ca1-49bc-9047-9e4600a2dbe5)

Considering How Decisions Are Made To Grow Particular Plants And Crops Depending On Environmental Conditions (ELBS876)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/90abfbf4-6521-4b9c-8d74-9e4600a2dbe5)

Comparing The Benefits Of Using Solid, Liquid Or Gaseous Fuels To Heat A Home (ELBS877)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/72c9457e-a3e5-45a6-ac50-9e4600a2dbe5)

Describing The Safety Aspects Of Using Gases (ELBS878)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/d23d3c1e-38be-4c9f-9d44-9e4600a2dbe5)

Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples’ lives (ACSHE083)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/415f52ba-bba3-49ef-9b4e-9e4600a2dbe5)

Scientific knowledge is used to inform personal and community decisions (ACSHE084)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/2e12148b-95f3-4f7b-abc6-9e4600a2dbe5)

Nature and development of science
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/977c4ca-cec6-438e-95d2-9e4600a2dbe5)

Use and influence of science
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/3f5e91f0-dc5e-4a4e-ba69-9e4600a2dbe5)

Exploring The Range Of Questions That Can Be Asked About A Problem Or Phenomena And With Guidance, Identifying Those Questions That Could Be Investigated (ELBS072)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/035ea57f-5f1f-4a37-bf95-9f7f00ccee60)

Applying Experience From Similar Situations In The Past To Predict What Might Happen In A New Situation (ELBS071)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/24e8a4e0-4c5b-4a53-b9e4-9f7f00ccee60)

With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be (ACSI023)

Experiencing A Range Of Ways Of Investigating Questions, Including Experimental Testing, Internet Research, Field Observations And Explorations (ELBS057)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/8c1f7422-35fc-4319-bb3a-9f7f00ccee3f)

Discussing The Advantages Of Certain Types Of Investigation For Answering Certain Types Of Questions (ELBS058)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/dcc0f290-626e-4070-be36-9f7f00ccee3f)

Considering Different Ways To Approach Problem Solving, Including Researching, Using Trial And Error, Experimental Testing And Creating Models (ELBS056)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/1dfb0ada-03-8d78-4f03-8c2c-9f7f00ccee3f)

Discussing In Groups How Investigations Can Be Made As Fair As Possible (ELBS059)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/03f4a870-7eff-4acc-8dce-9f7f00ccee3f)

Using Tools To Accurately Measure Objects And Events In Investigation And Exploring Which Tools Provide The Most Accurate Measurements (ELBS060)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/707b1b0f-046b-4ed8-9acec-9f7f00ccee3f)

Using Familiar Units Such As Grams, Seconds And Meters And Developing The Use Of Standard Multipliers Such As Kilometres And Millimetres (ELBS062)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/e8678997-7cfa-4974-bb81-9f7f00ccee3f)

Recording Data In Tables And Diagrams Or Electronically As Digital Images And Spreadsheets (ELBS060)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/44796a3b-5eb5-4537-a332-9f7f00ccee3f)

Explaining Rules For Safe Processes And Use Of Equipment (ELBS063)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/8977492b-aeb6-4281-9bf0-9f7f00ccee3f)

With guidance, plan appropriate investigation methods to answer questions or solve problems (ACSI086)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/4889a6dd-50a5-4e0f-ac0f-9f7f00ccee3f)

Decide which variable should be changed and measured in fair tests and accurately observe, measure and record data, using digital technologies as appropriate (ACSI087)
Choice Of Material Enhance The Audience's Understanding Of The Artist's Intention? Can You Develop Your Ideas Using
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/e68f0e5e-36e2-4bd0-aaf5-9e46002a2be9)

Constructing Tables, Graphs And Other Graphic Organisers To Show Trends In Data (ELBS0065)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/57cab55e-f816-4a33-b306-97f00c3e35b)

Identifying Patterns In Data And Developing Explanations That Fit These Patterns (ELBS064)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/20061ec-1ae4-418f-96b2-97ff00c3e35b)

Identifying Similarities And Differences In Qualitative Data In Order To Group Items Or Materials (ELBS0066)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/38df2850-f66e-4773-be34-97f00c3e35b)

Sharing Ideas As To Whether Observations Match Predictions, And Discussing Possible Reasons For Predictions Being Incorrect (ELBS0892)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/683a99d2-9efb-4e5a-84b4-9e46002a2be9)

Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate (ACSIM090)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/2f5f9dbd-2d4c-477b-92e2-9e46002a2be9)

Compare data with predictions and use as evidence in developing explanations (ACSIM218)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/4b6f9f2c-2c64-44e8-82e1-9e46002a2be9)

Working Collaboratively To Identify Where Methods Could Be Improved, including Where Testing Was Not Fair And Practices Could Be Improved (ELBS0071)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/04f5f57e-a69c-48a4-8991-97ff00c3e477)

Suggest improvements to the methods used to investigate a question or solve a problem (ACSIM091)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/45df1fba-9f0a-4e1b-b3f7-9e46002a2be9)

Discussing How Models Represent Scientific Ideas And Constructing Physical Models To Demonstrate An Aspect Of Scientific Understanding (ELBS0095)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/d72f2b7c-2200-4bd0-93e4-97ff00c3e46d)

Constructing Multi Modal Texts To Communicate Science Ideas (ELBS0068)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/823523d3-535b-4775-92a4-97ff00c3e46d)

Using Labelled Diagrams, Including Cross Sectional Representations. To Communicate Ideas (ELBS0070)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/e87a64ae-5bf2-4062-9e94-97ff00c3e46d)

Communicate ideas, explanations and processes in a variety of ways, including multi-modal texts (ACSIM092)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/9bf101de-2ca0-4e4f-af74-9e46002a2be9)

Questioning and predicting
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/d0ef22e6-4e4b-4e8b-b77b-9e46002a2be9)

Planning and conducting
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/7f04451b-7db4-470a-bf56-9e46002a2be5)

Processing and analysing data and information
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/3a76550d-f1de-481b-9cbe-9e46002a2be9)

Evaluating
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/85eda9ff-d17f-498a-939b-9e46002a2be9)

Communicating

Achievement Standard
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/83e7f7ff-c1c3-4e44-83fa-97ff00c3e57)

Science as a Human Endeavour
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/e4eebe2b-8772-455d-a2bd-9e46002a2be5)

Science Inquiry Skills

Achievement Standard
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/570d91b4-ccdf-459a-94f7-4e4a54c22c5a)

Selecting And Experimenting With Forms, Styles, Materials And Technologies To Explore Symbolic Use Of Visual Conventions Used By Various Cultures And Times, For Example, How Colour And Pattern Are Perceived As Symbolic In Different Cultures (ELBA4028)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/6e71f07d-b0b6-4484-bb0b-15c76097d35)


Experimenting With Alternative Styles Of Representation From Different Cultures And Times In Their Artworks, For Example, Realistic, Symbolic, Narrative, Abstract (ELBA4097)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/a0f0cc29-1f6f-4f3b-ac9e-9f7ff00c358e)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/44a05004-7b6a-43f8-9009-276e9990641af)

Practising A Variety Of Techniques And Use Various Technologies To Find Different Ways Of Interpreting A Theme And/OR Subject Matter, For Example, Making A Simple Animation Or Storybook (ELBA0004)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/9f9a4a44-d7fb-4f0f-89f8-5f69ff238805)

Manipulating And Experimenting With Combinations Of Various Materials And Technologies To Create Predictable Effects, For Example, Using Crosshatching To Create Tonal Or Design Elements To Focus Attention In A Composition (ELBA1358)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/3ef504a4-c4bd-4404-84e7-031f80565877)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/9abe933-7905-4405-9f0f-904f8a48f0a)

Applying Art And Design Techniques Effectively And Safely, Such As Modelling And Joining Clay, Marbling On Paper, Designing And Printing A Pattern (ELBA021)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/1oa1857d-046c-43ee-b1e3-d2ed4a222b66)

Making Decisions About How Their Artwork Could Be Displayed, For Example, Mounted And Framed, In Public Spaces, On The Internet, And In The Media (ELBA4046)
link (http://rdf.australiancurriculum.edu.au/elements/2014/09/140df9f-6eff-4f0f-9318-a3d35bab1f11)

Transmit Data In Wireless Or Mobile Networks (ELBT482)

Cables Are Used In Wired Networks To Transfer Data From One Digital System To Another, And Radio Waves Are Used To

Explaining How Data May Be Transmitted Between Two Digital Systems In Different Ways, For Example That Wires Or

Information Storage Components Include Cloud And External Devices (ELBT284)

Include The Central Processing Unit; External Output Components Including Speakers, Projector, Screen; And Data And

External Components For Inputting Data Including Keyboard, Microphone, Stylus; Internal Processing Components


Considering Viewpoints – Histories: For Example – What Did The Artist Want The Audience To See And Understand? (ELBVA060)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/798a139f-407b-45a4-bcb7-94afe8bd6467)

Recognising And Evaluating How Culture, Gender, Age, Time And Place, Among Other Factors, Impact On How The Audience Reads An Artwork, For Example (ELBVA026)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/6b7e3e1e-6f08-4866-adaf-93d85f8fbb46)


link (http://rdf.australiancurriculum.edu.au/elements/2014/09/1523979a-4095-444b-bba7-92c009b0b0c5)

Reflecting Critically On How Effectively Their Ideas Or Feelings Have Been Expressed In Their Own Artworks, And That Of Others (ELBVA029)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/33s3a38f1-e597-41d8-ad58-c2a2ca5a7493)

Considering Viewpoints – Skills, Techniques And Processes: For Example – How Did They Innovate Their Practice? (ELBVA028)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/5d75e9fe-0a4f-4e87-95e4-2c2f2b1b2f71)

Presenting Their Artworks Using Internet Based Technologies, Including Social Media (ELBVA053)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/92b958bb-99bf-4df9-bd05-9e0aabd4b91e)

Develop and apply techniques and processes when making their artworks (ACAVAM115)


Plan the display of artworks to enhance their meaning for an audience (ACAVAM116)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/ba0a483b-cdbb-4e6b-ac9c-903b8b8b5b02)

Years 5 And 6 Achievement Standard

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/9d261f7f-a9fd-4e16-8156-16374da17d5b)

Explore and use a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACDTIK007)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/268c13b7-9a35-4475-8a1d-14c6ba2ca3b0)

Using Different Peripheral Devices To Display Information To Others, For Example Using A Mobile Device, Interactive Whiteboard Or A Data Projector To Present Information (ELBIT177)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/9bc371d2-7ba6-4054-a9d6-b379f29e0c60)

Using Specific Peripheral Devices To Capture Different Types Of Data, For Example Using A Digital Microscope To Capture Images Of Living And Non Living Things (ELBIT199)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/7a3a7b17-9a3d-4488-ba1d-14c6ba2ca3b0)

Using Different Peripheral Devices To Display Information To Others, For Example Using A Mobile Device, Interactive Whiteboard Or A Data Projector To Present Information (ELBIT177)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/8db1f7f9-9a1d-4e16-8156-16374da17d5b)

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link (http://rdf.australiancurriculum.edu.au/elements/2014/09/268c13b7-9a35-4475-8a1d-14c6ba2ca3b0)

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link (http://rdf.australiancurriculum.edu.au/elements/2014/09/7a3a7b17-9a3d-4488-ba1d-14c6ba2ca3b0)

Experimenting With Different Types Of Digital System Components And Peripheral Devices To Perform Input, Output And Storage Functions, For Example A Keyboard, Stylius, Touch Screen, Switch Scan Device Or Joystick To Input Instructions; A Monitor, Printer Or Tablet To Display Information, A USB Flash Drive And External Hard Drive As Storage Peripheral Devices (ELBIT178)


Recognising That Images And Music Can Be Transferred From A Mobile Device To A Computer, For Example Using A Cable To Connect A Camera And Computer To Upload Images For A Photo Story (ELBIT775)


Investigate the main components of common digital systems, their basic functions and interactions, and how such digital systems may connect together to form networks to transmit data (ACDTIK016)


Describing Digital Systems As Having Internal And External Components That Perform Different Functions, For Example External Components For Inputting Data Including Keyboard, Microphone, Stylius; Internal Processing Components Include The Central Processing Unit; External Output Components Including Speakers, Projector, Screen; And Data And Information Storage Components Include Cloud And External Devices (ELBIT284)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/68f1f9af-eae5-4166-8201-6f254909be21)

Explaining How Data May Be Transmitted Between Two Digital Systems In Different Ways, For Example That Wires Or Cables Are Used In Wired Networks To Transfer Data From One Digital System To Another, And Radio Waves Are Used To Transmit Data In Wireless Or Mobile Networks (ELBIT482)

link (http://rdf.australiancurriculum.edu.au/elements/2014/09/820a58a5-c494-452c-94b0-943a6a0cad08)
Investigating How The Internal And External Components Of Digital Systems Are Coordinated To Handle Data, For Example How A Keyboard, Central Processing Unit And Screen Work Together To Accept, Manipulate And Present Data And Information (ELBT18)


Recognise the role of people in design and technologies occupations and explore factors, including sustainability that influence on the design of products, services and environments needs (ACTDEP010)

Demonstrate Safe, Responsible And Cooperative Work Practices When Making Designed Solutions (ELBT128)

Impact At Each Stage Of The Production Process (ELBT269)

Seeds (ELBT67)

Accuracy When Designing And Making, For Example Creating A Template, Measuring Ingredients In A Recipe, Sowing

Using Tools And Equipment Accurately When Measuring, Marking And Cutting; And Explaining The Importance Of

Using Appropriate Technologies Terms To Confidently Describe And Share With Others Procedures And Techniques For

Select and use materials, components, tools and equipment using safe work practices to make designed solutions (ACTDEP014)

Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment that produced designed solutions (ACTDEP014)

Critiquing Designed Products, Services And Environments To Establish The Factors That Influence The Design And Use Of Common Technologies, For Example The Characteristics That Contribute To Energy Efficient Cooking Such As Wok Cooking. The Suitability And Sustainable Use Of Particular Timbers (ELBT149)

Exploring The Different Uses Of Materials In A Range Of Products, Including Those From Aboriginal And Torres Strait Islander Communities And Countries Of Asia (ELBT219)

Critiquing And Selecting Appropriate Joining Techniques For Materials To Produce Working Models (ELBT423)

Examining The Suitability Of A Service Or Everyday System And Proposing Improvements, For Example A Water Saving System For A Bathroom At Home (ELBT54)

Examining The Structure And Production Of Everyday Products, Services And Environments To Enhance Their Own Design Ideas (ELBT301)

Investigating How The Different Designs Of Products, Services And Environments Can Be Explained And Communicated Effectively (ELBT149)

Investigating The Properties Of Materials To Determine Suitability, For Example The Absorbency Of Different Fabrics Or The Strength Of Different Resistant Materials (ELBT243)

Evaluate design ideas, processes and solutions based on criteria for success developed with guidance and including care for the environment (ACTDEP017)

Negotiating Criteria For Success With Class Or Group Members (ELBT411)

Evaluating, Revising And Selecting Design Ideas, Based On Criteria For Success And Including Consideration Of Ethics, Social Values And Sustainability (ELBT342)

Evaluating The Functional And Aesthetic Qualities Of A Designed Solution (ELBT35)

Reflecting On The Sustainability Implications Of Selected Designed Solutions (ELBT168)

Comparing The Amount Of Waste That Would Be Produced From Different Design And Development Options And The Potential For Recycling Waste (ELBT406)

Reflecting On The Sustainability Of A Designed Solution (ELBT35)

Select and use materials, components, tools and equipment using safe working practices to make simple designed solutions (ACTDEP016)

Using Appropriate Technologies Terms To Confidently Describe And Share With Others Procedures And Techniques For Making, For Example Cutting And Joining Materials (ELBT65)

Exploring Ways Of Joining, Connecting And Assembling Components That Ensure Success, And The Impact Digital Technologies Has Had On These Processes (ELBT250)

Using Tools And Equipment Accurately When Measuring, Marking And Cutting: And Explaining The Importance Of Accuracy When Designing And Making, For Example Creating A Template, Measuring Ingredients In A Recipe, Sowing Seeds (ELBT67)

Selecting And Using Materials, Components, Tools, Equipment And Processes With Consideration Of The Environmental Impact At Each Stage Of The Production Process (ELBT269)

Demonstrating Safe, Responsible And Cooperative Work Practices When Making Designed Solutions (ELBT128)

Generate, develop, and communicate design ideas and decisions using appropriate technical terms and graphical representation techniques (ACTDEP015)