**Year 3 & 4 Band Level Technologies Overview Suggestion By Joanne Villis  
SUBJECT: Design and Technologies**

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| **STRAND: Knowledge and understanding** | | | **STRAND: Processes and production skills** | | |
| **CONTENT DESCRIPTOR** | **YEAR 3 TOPIC** | **YEAR 4 TOPIC** | **CONTENT DESCRIPTOR** | **YEAR 3 TOPIC** | **YEAR 4 TOPIC** |
| Recognise the role of people in design and [technologies](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Technologies) occupations and explore factors, including sustainability that impact on the design of products, services and environments to meet community needs [(ACTDEK010)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEK010) | Solar ovens | Bottled water | Critique needs or opportunities for designing and explore and test a variety of [materials](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Materials), components, tools and equipment and the techniques needed to produce [designed solutions](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Designed%20solutions) [(ACTDEP014)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEP014) | Bee Bots | 3D Model |
| Investigate how forces and the properties of [materials](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Materials) affect the behaviour of a [product](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Product) or system [(ACTDEK011)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEK011) | Bee Bots Gears | 3D model  Bee Bots | Generate, develop, and communicate design ideas and decisions using appropriate technical terms and [graphical representation techniques](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Graphical%20representation%20techniques) [(ACTDEP015)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEP015) | Bee Bots | Bee Bots |
| Investigate [food and fibre production](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Food%20and%20fibre%20production) and food [technologies](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Technologies) used in modern and traditional societies [(ACTDEK012)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEK012) | Milk production Rice | Indigenous Seasonal Australian foods | Select and use [materials](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Materials), components, tools and equipment using safe work practices to make [designed solutions](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Designed%20solutions) [(ACTDEP016)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEP016) | Bee Bots  Marble Run | 3D Model |
| Investigate the suitability of [materials](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Materials), [systems](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Systems), components, tools and equipment for a range of purposes [(ACTDEK013)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEK013) | Solar ovens | Bottled water | Evaluate design ideas, processes and solutions based on criteria for success developed with guidance and including care for the [environment](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Environment) [(ACTDEP017)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEP017) | Bee Bots Marble Run | 3D Model |
|  | | | Plan a sequence of production steps when making [designed solutions](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Designed%20solutions) individually and collaboratively [(ACTDEP018)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDEP018) |  | 3D Model  Bee Bots |

**SUBJECT: Digital Technologies**

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| **STRAND: Knowledge and understanding** | | | **STRAND: Processes and production skills** | | |
| **CONTENT DESCRIPTOR** | **YEAR 3 TOPIC** | **YEAR 4 TOPIC** | **CONTENT DESCRIPTOR** | **YEAR 3 TOPIC** | **YEAR 4 TOPIC** |
| Explore and use a range of [digital systems](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Digital%20systems) with [peripheral devices](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Peripheral%20devices) for different purposes, and transmit different types of [data](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Data) [(ACTDIK007)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDIK007) | Data Email | Sound data | Collect, access and present different types of [data](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Data) using simple software to create information and solve problems [(ACTDIP009)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDIP009) | Data | Sound data |
| Recognise different types of [data](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Data) and explore how the same [data](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Data) can be represented in different ways [(ACTDIK008)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDIK008) | Data QR Codes |  | Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them [(ACTDIP010)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDIP010) | Intro to coding | Hopscotch (coding) |
|  | | | Implement simple [digital solutions](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Digital%20solutions) as visual programs with algorithms involving [branching](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Branching) (decisions) and user input [(ACTDIP011)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDIP011) | Bee Bots | Hopscotch (coding) Bee Bots |
| Explain how developed solutions and existing [information systems](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Information%20systems) meet common personal, school or community needs, and envisage new ways of using them [(ACTDIP012)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDIP012) | Robots | Young inventors |
| Work with others to plan the creation and communication of ideas and information safely, applying agreed ethical and [social protocols](http://www.australiancurriculum.edu.au/Glossary?a=T&t=Social%20protocols) [(ACTDIP013)](http://www.australiancurriculum.edu.au/Curriculum/ContentDescription/ACTDIP013) | Email Blogging |  |

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