JUNIOR CREW

Primary School Program for Years 3, 4 and 5

Course Overview

Junior Crew Overview

Introduction

The revised Junior Crew Pack has been developed by the Department of Transport (DoT) in consultation with the School Curriculum and Standards Authority (SCSA) to provide a marine safety educational package for Western Australian primary schools students (years 3,4 and 5).

The Recreational Skippers Ticket (RST) in Western Australia has resulted in greater awareness of marine safety responsibilities amongst vessel operators. The knowledge and skills required as part of the RST can also be discovered by primary aged students through the use of the Junior Crew Pack.

The program will introduce students to marine safety messages, specifically the safe use of boats and what they should know to ensure their own safety and that of others while boating.

Overview of the Junior Crew program

The Junior Crew program consists of five marine safety topics and a culmination task that uses these topics as a foundation to support the final marine safety message. At the completion of the program students can be awarded a Junior Crew Certificate.

Topic	Information covered
1. Weather is king	Boating weather information
2. Safety saves lives	Safety equipment used in boats
3. Keep your boat afloat	Overloading and buoyancy of a boat
4. Tell someone where you are going	Logging on for a voyage on the water
5. In an accident & REVISION (contains the Culmination Task - Be Boatwise)	Actions to take in the event of an accident & revision of the first four topics

Each topic contains a number of worksheets and a choice of major activities. Students must complete at least one worksheet from each topic and at least two of the major activities from any combination of the first four topics.

Once at least five worksheets and two major tasks have been completed, the culmination task Be Boatwise can then be undertaken. This final task brings together all of the topics to give the final marine safety message.

It is expected that teachers will work through each topic and select at least one worksheet for the class to complete. The worksheets have been designed with various levels of difficulty to suit each class level.

The Junior Crew Certificate: *(minimum requirements)*

5 x worksheets (one from each of the five topics); plus

2 x major activities (from any combination of of the first four topics); then

complete the culmination task Be Boatwise.

= Junior Crew Certificate.

Junior Crew Logbook

At the start of the program students should be issued with a Junior Crew Logbook. This is designed to assist teachers and students in keeping track of their progress. As the student completes a worksheet or major activity they must have it signed off in their Junior Crew Logbook. This can be done by the teacher, parent or guardian.

The number and selection of worksheets and activities for the Junior Crew Certificate is flexible to allow teachers to target their specific class level, teaching background and time frames.

By completing each of the five topics and the culmination task, teachers will help students identify the crucial marine safety messages they need to understand to be safe and confident when on the water.

Colour Coding

The Resource Kit, Worksheets and Flashcards have been colour coded to help identify which items are associated with each topic. Look for the small, coloured triangle in the top right corner of each item.
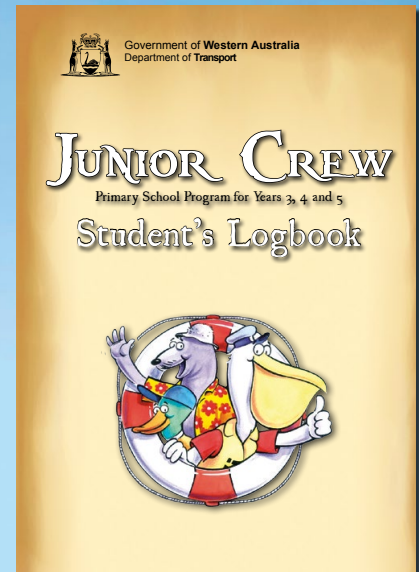
Junior Crew Pack contents

- **Junior Crew Course Overview:** Contains an overview of the program, delivery methods and links to the Western Australian Curriculum.

- **Teacher's Resource Kit:** contains the topics, tasks, worksheets, major activities, resource lists, discussion points and background marine safety information.

- **Worksheet Pack:** Contains the 24 worksheets in a format suitable for photocopying.

- **Skip the Boat Safe Bird Storybook:** Short story to promote discussion on marine safety messages.

- **Junior Crew Logbook and Certificate:** Samples of the stationary that should be issued to the students.

- **A3 Flashcard poster pack:** Contains 37 x A3 posters to place around the classroom. The posters can be used to promote discussion and assist in lesson delivery of the topics.
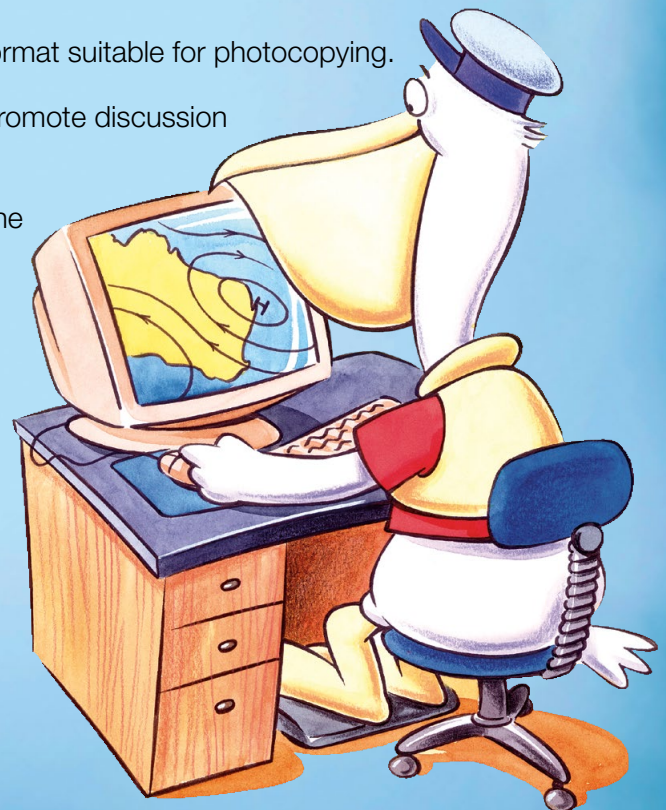
Western Australian Curriculum

The Junior Crew Pack is aligned to the Western Australian Curriculum. The specific content covered by the pack in the middle learning area is outlined on the following pages. Teachers can offer this course as a cross curricular program.

The general capabilities encompass the knowledge, skills, behaviours and dispositions that, together with curriculum content in each learning area and the cross-curriculum priorities, will assist students to live and work successfully in the twenty-first century. They complement the key learning outcomes of the Early Years Learning Framework (COAG 2009) – that children have a strong sense of identity and wellbeing, are connected with and contribute to their world, are confident and involved learners and effective communicators. (pp 3 General Capabilities in the Australian Curriculum - January 2013 (updated September 2014)).

Two of the seven general capabilities have been addressed within the Junior Crew Pack. These are:

Critical and creative thinking

In the Australian Curriculum, students develop capability in critical and creative thinking as they learn to generate and evaluate knowledge, clarify concepts and ideas, seek possibilities, consider alternatives and solve problems. Critical and creative thinking are integral to activities that require students to think broadly and deeply using skills, behaviours and dispositions such as reason, logic, resourcefulness, imagination and innovation in all learning areas at school and in their lives beyond school. (General Capabilities in the Australian Curriculum - January 2013 (updated September 2014) - Critical and Creative Thinking).

Personal and social capability

In the Australian Curriculum, students develop personal and social capability as they learn to understand themselves and others, and manage their relationships, lives, work and learning more effectively. The capability involves students in a range of practices including recognising and regulating emotions, developing empathy for others and understanding relationships, establishing and building positive relationships, making responsible decisions, working effectively in teams, handling challenging situations constructively and developing leadership skills. (General Capabilities in the Australian Curriculum - January 2013 (updated September 2014) Personal and social capability).

LEARNING AREA CONTENT CHARTS

ENGLISH LEARNING AREA
Language

Content Organisers	Year 3	Year 4	Year 5
Language for interaction	✓	✓	✓
Text structure and organisation	✓	✓	✓
Expressing and developing ideas	✓	✓	✗

Literacy

Content Organisers	Year 3	Year 4	Year 5
Interacting with others	✓	✓	✓
Interpreting, analysing, evaluating	✓	✓	✓
Creating texts	✓	✓	✓

MATHEMATICS LEARNING AREA
Measurement and Geometry

Content Organisers	Year 3	Year 4	Year 5
Using units of measurement	✓	✓	✓

Statistics and Probability

Content Organisers	Year 3	Year 4	Year 5
Data representation and interpretation	✓	✓	✓

HEALTH LEARNING AREA
Personal, Social and Community Health

Content Organisers	Year 3	Year 4	Year 5
Being healthy, safe and active	✓	✓	✓

HUMANITIES AND SOCIAL SCIENCES
Humanities and Social Sciences Skills

Content Organisers	Year 3	Year 4	Year 5
Questioning and reseaching	✓	✓	✓
Analysing	✓	✓	✓
Evaluating	✓	✓	✓
Communicating and reflecting	✓	✓	✓

SCIENCE LEARNING AREA			
Science Understanding			
Content Organisers	Year 3	Year 4	Year 5
Physical sciences	✓	✓	✗
Science as a Human Endeavour			
Content Organisers	Year 3	Year 4	Year 5
Nature and development of science	✓	✓	✓
Science Inquiry Skills			
Content Organisers	Year 3	Year 4	Year 5
Questioning and predicting	✓	✓	✓
Planning and conducting	✓	✓	✓
Processing and analysing data and information	✓	✓	✓
Evaluating	✓	✓	✓
Communicating	✓	✓	✓

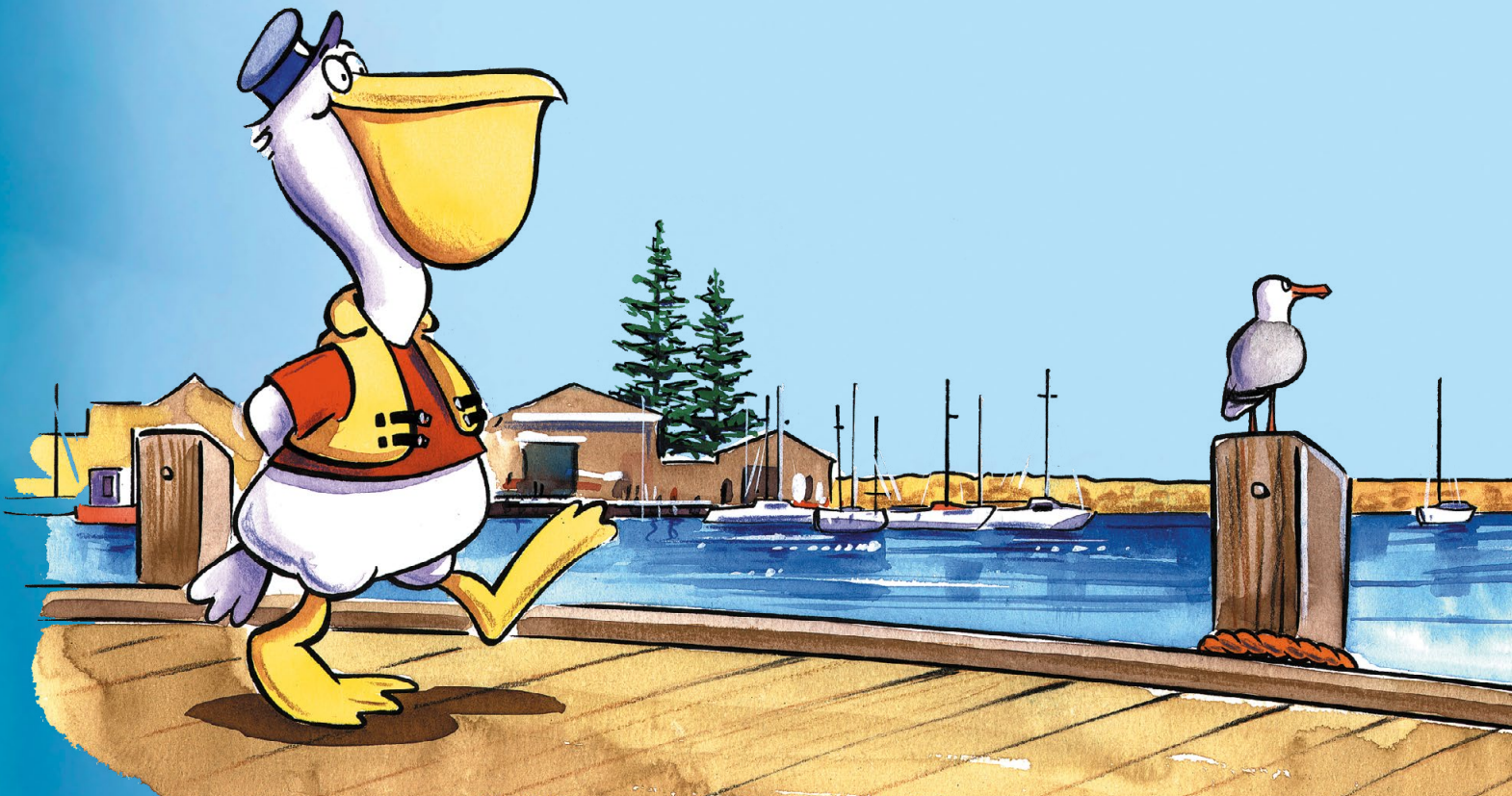| TECHNOLOGIES LEARNING AREA			
Design Technologies, Processes and Production Skills			
Content Organisers	Year 3	Year 4	Year 5
Investigating and defining	✓	✓	✓
Designing	✓	✓	✗
Producing and implementing	✓	✓	✓
Evaluating	✓	✓	✓
Collaborating & managing	✓	✓	✓
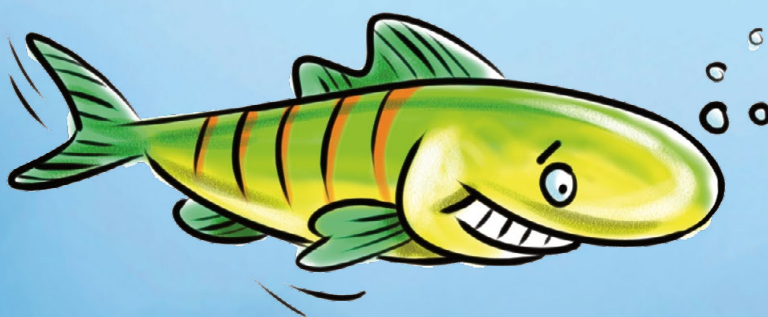
ENGLISH

Language

Learning Area	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Language for interaction Year 3	Understand that successful cooperation with others depends on shared use of social conventions, including turn-taking patterns, and forms of address that vary according to the degree of formality in social situations (ACELA1476).	Students cooperate with each other using turn-taking patterns, and forms of address that vary according to the situation in order to ascertain the best survival equipment, create a design for a boat, design a log on sheet, and present their ideas.	Topic 2 – Safety Saves Lives • Major Activity 1 – Survival Kit Topic 3 – Keep your boat afloat • Major Activity 1 – Float a boat Topic 4 – Tell someone where you are going • Major Activity 2 – Classroom Log on
Language for interaction Year 4	Understand that social interactions influence the way people engage with ideas and respond to others for example when exploring and clarifying the ideas of others, summarising their own views and reporting them to a larger group (ACELA1488).	Understand that social interactions influence the way people engage with ideas and respond to others for example when exploring and clarifying the ideas such as boat design, summarising their own views and reporting them to a larger group as with the survival kit activity.	Topic 2 – Safety saves lives • Major Activity – Survival kit Topic 3 – Keep your boat afloat • Major Activity 1 – Float a boat
Language for interaction Year 5	Understand that patterns of language interaction vary across social contexts and types of texts and that they help to signal social roles and relationships (ACELA1501).	Understand that patterns of language interaction vary across social contexts and types of texts such as the use of phonetic alphabet when communicating over the radio.	Topic 4 – Tell someone where you are going • Worksheet 16 – 18
Text structure and organisation Year 3	Understand how different types of texts vary in use of language choices, depending on their purpose and context (for example, tense and types of sentences) (ACELA1478).	Understand how different types of texts vary in use of language choices, depending on their purpose and context such as the precise language needed for trip tags.	Topic 4 – Tell someone where you are going • Major Activity 1 – Trip tag
Text structure and organisation Year 3	Identify the features of online texts that enhance navigation (ACELA1790).	Identify the features of online texts that enhance navigation whilst researching weather forecasts.	Topic 1 – Weather is King • Preliminary activities
Text structure and organisation Year 4	Understand how texts vary in complexity and technicality depending on the approach to the topic, the purpose and the intended audience (ACELA1490).	Understand how texts vary in complexity and technicality depending on the approach to the topic of weather forecasting, the purpose and the intended audience of the weather.	Topic 1 – Weather is King • Preliminary activities
Text structure and organisation Year 4	Identify features of online texts that enhance readability including text, navigation, links, graphics and layout (ACELA1793).	Identify features of online weather forecast texts that enhance readability including text, navigation, links, graphics and layout.	Topic 1 – Weather is King • Preliminary activities
Text structure and organisation Year 5	Understand how texts vary in purpose, structure and topic as well as the degree of formality (ACELA1504).	Understand how texts vary in purpose, structure and topic as well as the degree of formality when designing ways to give information about boat trip.	Topic 4 – Tell someone where you are going • Classroom activities

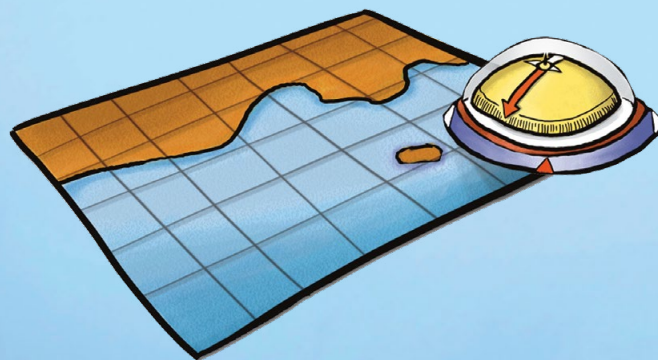| Language			
Learning Area	**Content Organiser/key concepts**	**Content specific to Junior Crew related to key concepts**	**Activity/worksheet to assess concept**
Text structure and organisation Year 5	Investigate how the organisation of texts into chapters, headings, subheadings, home pages and sub pages for online texts and according to chronology or topic can be used to predict content and assist navigation (ACELA1797).	Investigate how the organisation of forecast web sites, into chapters, headings, subheadings, home pages and sub pages for online texts and according to chronology or topic can be used to predict content and assist navigation.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Expressing and developing ideas Year 3	Learn extended and technical vocabulary and ways of expressing opinion including modal verbs and adverbs (ACELA1484).	Students learn extended and technical vocabulary and ways of expressing opinion while learning about survival equipment and deciding what is most important.	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit
Expressing and developing ideas Year 4	Incorporate new vocabulary from a range of sources into students' own texts including vocabulary encountered in research (ACELA1498).	Students incorporate new vocabulary from a range of sources into their own imaginative story including vocabulary encountered in research.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 Topic 5 -In an accident • Culmination task – Be Boatwise

Literacy			
Learning Area	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Interacting with others Year 3	Listen to and contribute to conversations and discussions to share information and ideas and negotiate in collaborative situations (ACELY1676).	Students listen to and contribute to conversations and discussions to share information and ideas and negotiate in collaborative situations in all classroom activities.	Topic 1 - Weather is King • Classroom activities Topic 2 – Safety saves lives • Classroom activities Topic 3 - Keep your boat afloat • Classroom activities Topic 4 -Tell someone where you are going • Classroom activities Topic 5 -In an accident • Classroom activities
Interacting with others Year 4	Interpret ideas and information in spoken texts and listen for key points in order to carry out tasks and use information to share and extend ideas and information (ACELY1687).	During all classroom activities students will interpret ideas and information in spoken texts and listen for key points in order to carry out tasks and use information to share and extend ideas and information.	Topic 1 - Weather is King • Classroom activities Topic 2 – Safety saves lives • Classroom activities Topic 3 - Keep your boat afloat • Classroom activities Topic 4 -Tell someone where you are going • Classroom activities Topic 5 -In an accident • Classroom activities
Interacting with others Year 5	Clarify understanding of content as it unfolds in formal and informal situations, connecting ideas to students' own experiences and present and justify a point of view (ACELY1699).	Students clarify understanding of content as it unfolds in formal and informal situations, connecting ideas to their own experiences and present and justify a point of view when deciding on what survival equipment is most essential.	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit

Literacy			
Learning Area	**Content Organiser/key concepts**	**Content specific to Junior Crew related to key concepts**	**Activity/worksheet to assess concept**
Interpreting, analysing, evaluating Year 3	Identify the audience and purpose of imaginative, informative and persuasive texts (ACELY1678).	Identify the audience and purpose of 'Skip the boat safe bird' and the student's own version of the story.	Topic 1 - Weather is King • Major Activity 1 – Create a cartoon Topic 5 -In an accident • Culmination task – Be Boatwise
Interpreting, analysing, evaluating Year 3	Use comprehension strategies to build literal and inferred meaning and begin to evaluate texts by drawing on a growing knowledge of context, text structures and language features (ACELY1680).	Use comprehension strategies to build literal and inferred meaning and begin to evaluate texts by drawing on a growing knowledge of context, text structures and language features including Skip story and weather forecasts.	Topic 1 - Weather is King • Classroom activities • Major Activity 2 – Weather forecast
Interpreting, analysing, evaluating Year 4	Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts (ACELY1692).	Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts including Skip story and weather forecasts.	Topic 1 - Weather is King • Classroom activities • Major Activity 2 – Weather forecast
Interpreting, analysing, evaluating Year 4 Year 5	Identify and explain characteristic text structures and language features used in imaginative, informative and persuasive texts to meet the purpose of the text (ACELY1690) (ACELY1701).	Identify and explain characteristic text structures and language features used in imaginative story of 'Skip the boat safe bird' to meet the purpose of the text.	Topic 1 - Weather is King • Classroom activities
Interpreting, analysing, evaluating Year 5	Use comprehension strategies to analyse information, integrating and linking ideas from a variety of print and digital sources (ACELY1703).	Use comprehension strategies to analyse information, integrating and linking ideas from a variety of print and digital sources on weather forecasts.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast

Literacy

Learning Area	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Creating texts Year 3	Plan, draft and publish imaginative, informative and persuasive texts demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose (ACELY1682).	Plan, draft and publish imaginative text of 'Skip the boat safe bird', demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose.	Topic 1 - Weather is King • Major Activity 1 – Create a cartoon Topic 5 -In an accident • Culmination task – Be Boatwise
Creating texts Year 4	Plan, draft and publish imaginative, informative and persuasive texts containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features (ACELY1694).	Plan, draft and publish imaginative text of 'Skip the boat safe bird', containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features.	Topic 1 - Weather is King • Major Activity 1 – Create a cartoon Topic 5 -In an accident • Culmination task – Be Boatwise
Creating texts Year 5	Plan, draft and publish imaginative, informative and persuasive print and multimodal texts, choosing text structures, language features, images and sound appropriate to purpose and audience (ACELY1704.)	Plan, draft and publish imaginative text of 'Skip the boat safe bird', choosing text structures, language features, images and sound appropriate to purpose and audience .	Topic 1 - Weather is King • Major Activity 1 – Create a cartoon Topic 5 -In an accident • Culmination task – Be Boatwise

MATHEMATICS
Measurement and Geometry

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Using units of measurement Year 3	Measure, order and compare objects using familiar metric units of length, mass and capacity (ACMMG061).	Students measure, order and compare objects using familiar metric units of length and mass during the design and creation of their boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Using units of measurement Year 4	Use scaled instruments to measure and compare lengths, masses, capacities and temperatures (ACMMG084).	Students use scaled instruments to measure and compare lengths, masses during the design and creation of their boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat t
Using units of measurement Year 5	Choose appropriate units of measurement for length, area, volume, capacity and mass (ACMMG108).	Students choose appropriate units of measurement for length, and mass during the design and creation of their boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

Statistics and Probability

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Data representation and interpretation Year 3	Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording (ACMSP068).	Students identify questions or issues for categorical variables when designing and assessing the design of their boats. They identify data sources and plan methods of data collection and recording when collating research on weather forecasts.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Data representation and interpretation Year 3	Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (ACMSP069).	Collect weather forecast and buoyancy data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Data representation and interpretation Year 3	Interpret and compare data displays (ACMSP070).	Interpret and compare weather and buoyancy data displays.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Data representation and interpretation Year 4	Select and trial methods for data collection, including survey questions and recording sheets (ACMSP095).	Select and trial methods for weather and buoyancy data collection, including survey questions and recording sheets .	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

Statistics and Probability

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Data representation and interpretation Year 4	Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (ACMSP096).	Construct suitable weather and buoyancy data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Data representation and interpretation Year 4	Evaluate the effectiveness of different displays in illustrating data features including variability (ACMSP097).	Evaluate the effectiveness of different weather and buoyancy displays in illustrating data features including variability.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Data representation and interpretation Year 5	Pose questions and collect categorical or numerical data by observation or survey (ACMSP118).	Pose questions and collect categorical or numerical weather and buoyancy data by observation and survey.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Data representation and interpretation Year 5	Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (ACMSP119).	Construct displays, including column graphs, dot plots and tables, appropriate for weather and buoyancy data, with and without the use of digital technologies.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Data representation and interpretation Year 5	Describe and interpret different data sets in context (ACMSP120).	Describe and interpret different weather and buoyancy data sets in context.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

HEALTH
Personal, Social and Community Health

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Being healthy, safe and active Years 3	Assertive behaviours and communication skills to respond to unsafe situations, such as: • keeping calm • using appropriate non-verbal communication skills • seeking help (ACPPS035)	Assertive behaviours and communication skills to respond to unsafe situations, such as: • keeping calm • pre preparing with trip tags • seeking help with use of survival kit	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit Topic 4 -Tell someone where you are going • Major Activity 1 – Complete the trip tag journey Topic 5 -In an accident • Flashcards 35 and 36 • Preliminary activities • Worksheets 19 – 24
Being healthy, safe and active Years 4	Personal behaviours and strategies to remain safe in uncomfortable or unsafe situations, such as: • being alert and aware of unsafe situations • using assertive behaviour and language • knowing who or where to go for help in the community (ACPPS035)	Personal behaviours and strategies to remain safe in uncomfortable or unsafe situations, such as: • being alert and aware of unsafe situations and pre preparing with trip tags • knowing who or where to go for help in marine situations	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit Topic 4 -Tell someone where you are going • Major Activity 1 – Complete the trip tag journey Topic 5 -In an accident • Flashcards 35 and 36 • Preliminary activities • Worksheets 19 - 24
Being healthy, safe and active Years 5	Preventive health measures that promote and maintain an individual's health, safety and wellbeing, such as: • bicycle safety • sun safety (ACPPS058)	Preventive health measures that promote and maintain an individual's health, safety and wellbeing, such as: • marine safety • trip tags	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit Topic 4 -Tell someone where you are going • Major Activity 1 – Complete the trip tag journey

HUMANITIES AND SOCIAL SCIENCES

Humanities and Social Sciences Skills

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Questioning and Researching Year 3 Year 4	Develop a range of focus questions to investigate.	During discussion on survival equipment and the design of boats students develop a range of focus questions to investigate.	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Questioning and Researching Year 5	Develop and refine a range of questions required to plan an inquiry.	Students develop and refine a range of questions required to plan an inquiry on survival equipment and the design of boats .	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Questioning and Researching Year 3 Year 4	Locate and collect information from a variety of sources (e.g. photographs, maps, books, interviews, internet).	Students locate and collect weather information from a variety of sources (e.g. photographs, maps, books, interviews, internet).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Questioning and Researching Year 5	Locate and collect information and/or data from a range of appropriate primary sources and secondary sources (e.g. museums, media, library catalogues, interviews, internet).	Students locate and collect weather information and/or data from a range of appropriate primary sources and secondary sources (e.g. media, interviews, internet).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Questioning and Researching Year 3 Year 4	Record selected information and/or data (e.g. use graphic organisers, develop note-taking strategies).	Students record selected weather information and/or data (e.g. use graphic organisers, develop note-taking strategies).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Questioning and Researching Year 5	Record selected information and/or data using a variety of methods (e.g. use graphic organisers, paraphrase, summarise).	Students record selected weather information and/or data using a variety of methods (e.g. use graphic organisers, paraphrase, summarise).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast

Humanities and Social Sciences Skills			
Learning Area Outcomes	Skill	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Analysing Year 3 Year 4	Develop criteria for selecting relevant information (e.g. accuracy, reliability, usefulness).	Students develop criteria for selecting relevant weather information (e.g. accuracy, reliability, usefulness).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Analysing Year 5	Use criteria to determine the relevancy of information (e.g. consider accuracy, reliability, publication date, usefulness to the question).	Students use criteria to determine the relevancy of weather information (e.g. consider accuracy, reliability, publication date, usefulness to the question).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Analysing Year 3 Year 4	Interpret information and/or data collected (e.g. sequence events in chronological order, identify patterns and trends, make connections between old and new information).	Students interpret weather information and/or data collected (e.g. sequence events in chronological order, identify patterns and trends, make connections between old and new information).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Analysing Year 5	Interpret information and/or data collected (e.g. sequence events in chronological order, identify cause and effect, make connections with prior knowledge).	Students interpret weather information and/or data collected (e.g. sequence events in chronological order, identify cause and effect, make connections with prior knowledge).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Analysing Year 3 Year 4	Translate collected information and/or data into different formats (e.g. create a timeline, change data in to a table and/or graph).	Students translate collected weather information and/or data into different formats (e.g. create a timeline, change data in to a table and/or graph).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Analysing Year 5	Translate collected information and/or data into a variety of different formats (e.g. create a timeline, draw maps, convert a table of statistics into a graph).	Students translate collected weather information and/or data into a variety of different formats (e.g. create a timeline, draw maps, convert a table of statistics into a graph).	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Evaluating Year 3 Year 4	Use decision-making processes (e.g. share views, recognise different points of view, identify issues, identify possible solutions, plan for action in groups).	During discussion on survival equipment and the design of boats students use decision-making processes (e.g. share views, recognise different points of view, identify issues, identify possible solutions, plan for action in groups).	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

Humanities and Social Sciences Skills

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Evaluating Year 5	Use decision-making processes (e.g. share opinions and personal perspectives, consider different points of view, identify issues, develop possible solutions, plan for action, identify advantages and disadvantages of different options).	During discussion on survival equipment and the design of boats students use decision-making processes (e.g. share opinions and personal perspectives, consider different points of view, identify issues, develop possible solutions, plan for action, identify advantages and disadvantages of different options).	Topic 2 – Safety saves lives • Classroom activities 1 and 2 • Worksheets 5 – 10 • Major Activity – Survival kit Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Communicating and Reflecting Year 3 Year 4	Present findings and conclusions in a range of communication forms (e.g. written, oral, visual, digital, tabular, graphic), appropriate to audience and purpose, using relevant terms.	Students present findings from weather research and their conclusions in a range of communication forms (e.g. written, oral, visual, digital, tabular, graphic), appropriate to audience and purpose, using relevant terms.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast
Communicating and Reflecting Year 5	Present findings, conclusions and/or arguments, appropriate to audience and purpose, in a range of communication forms (e.g. written, oral, visual, digital, tabular, graphic, maps) and using subject-specific terminology and concepts.	Students present findings and conclusions from weather research and/or their arguments, appropriate to their audience and purpose, in a range of communication forms (e.g. written, oral, visual, digital, tabular, graphic, maps) and using subject-specific terminology and concepts.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast

SCIENCE

Science Understanding

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Physical sciences Year 3	Heat can be produced in many ways and can move from one object to another (ACSSU049).	Students understand that heat can be produced in many ways and can move from one object to another with the aid of huddling and H.E.L.P.	Topic 5 - In an accident • Flashcards 36 and 37 • Preliminary activities
Physical sciences Year 4	Forces can be exerted by one object on another through direct contact or from a distance (ACSSU076).	Students understand that forces can be exerted by one object on another through direct contact or from a distance. In particular the force of wind on a boat and the movement of people within a boat.	Topic 3 - Keep your boat afloat • Preliminary activities • Worksheet 12

Science as a Human Endeavour

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Nature and development of science Year 3 Year 4	Science involves making predictions and describing patterns and relationships (ACSHE050) (ACSHE061).	Creating their own cartoon and researching weather forecasts help students to understand that weather science involves making predictions and describing patterns and relationships.	Topic 1 - Weather is King • Major Activity 1 & 2 – Create a cartoon and Weather forecast
Nature and development of science Year 5	Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHE081).	Researching weather forecast data helps students to understand that weather science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast

Science Inquiry Skills

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Questioning and predicting Year 3 Year 4	With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge (ACSIS053) (ACSIS064).	With guidance, identify questions about buoyancy that can be investigated scientifically and predict what might happen based on prior knowledge .	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Questioning and predicting Year 5	With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be (ACSIS231).	With guidance, pose questions to clarify practical problems about buoyance that inform a scientific investigation, and predict what the findings of the investigation might be.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

Science Inquiry Skills

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Planning and conducting Year 3 Year 4	Suggest ways to plan and conduct investigations to find answers to questions (ACSIS054) (ACSIS065).	Suggest ways to plan and conduct investigations into buoyancy and weight distribution to find answers to questions regarding trim and boat safety.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Planning and conducting Year 3 Year 4	Safely use appropriate materials, tools or equipment to make and record observations, using formal measurements and digital technologies as appropriate (ACSIS055) (ACSIS066).	Safely use appropriate materials, tools or equipment to make and record observations, of boat trim and buoyancy using formal measurements and digital technologies as appropriate.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Planning and conducting Year 5	With guidance, plan appropriate investigation methods to answer questions or solve problems (ACSIS086).	With guidance, plan appropriate investigation methods to answer questions or solve problems regarding trim, buoyancy and boat safety.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Planning and conducting Year 5	Decide which variable should be changed and measured in fair tests and accurately observe, measure and record data, using digital technologies as appropriate (ACSIS087).	Decide which variable should be changed and measured in fair tests and accurately observe, measure and record data, using digital technologies as appropriate to answer questions or solve problems regarding trim, buoyancy and boat safety.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Planning and conducting Year 5	Use equipment and materials safely, identifying potential risks (ACSIS088).	Use equipment and materials safely, identifying potential risks when completing boat testing.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Processing and analysing data and information Year 3 Year 4	Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends (ACSIS057) (ACSIS068).	Use table and simple column graphs to represent data and to identify patterns and trends from buoyancy tests and weather forecasts.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Processing and analysing data and information Year 3 Year 4	Compare results with predictions, suggesting possible reasons for findings (ACSIS215) (ACSIS216).	Compare results with predictions, suggesting possible reasons for findings in buoyancy tests.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Processing and analysing data and information Year 5	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 (ACSIS090).	Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in buoyancy tests and weather forecasts using digital technologies as appropriate.	Topic 1 - Weather is King • Major Activity 2 – Weather forecast Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Processing and analysing data and information Year 5	Compare data with predictions and use as evidence in developing explanations (ACSIS218).	Compare buoyancy test data with predictions and use as evidence in developing explanations for boat safety.	Topic 3 - Keep your boat afloat Major Activity 1 – Float a boat

Science Inquiry Skills

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Evaluating Year 3 Year 4	Reflect on the investigation, including whether a test was fair or not (ACSIS058) (ACSIS069).	Reflect on the buoyancy investigation, including whether the test was fair or not.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Evaluating Year 5	Suggest improvements to the methods used to investigate a question or solve a problem (ACSIS091).	Suggest improvements to the methods used to investigate buoyancy, trim and boat safety.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Communicating Year 3 Year 4	Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports (ACSIS060) (ACSIS071).	Represent and communicate ideas and findings of buoyancy tests in a variety of ways such as diagrams, physical representations and simple reports.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Communicating Year 5	Communicate ideas, explanations and processes in a variety of ways, including multi-modal texts (ACSIS093).	Communicate ideas, explanations and processes of buoyancy tests in a variety of ways, including multi-modal texts.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

TECHNOLOGIES
Design Technologies, Processes and Production Skills

Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Investigating and defining Year 3	Create a sequence of steps to solve a given task.	Create a sequence of steps to produce a boat that floats with weight.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Investigating and defining Year 4	Define a sequence of steps to design a solution for a given task.	Define a sequence of steps to design a solution for how to produce a boat that floats with weight.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Investigating and Defining Year 5	Define a problem, and set of sequenced steps, with users making a decision to create a solution for a given task.	Define the boat design problem, and a set of sequenced steps, with users making a decision to create a solution for how to ensure it floats with weight.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Designing Year 3	Develop and communicate ideas using labelled drawings and appropriate technical terms.	Develop and communicate boat design ideas using labelled drawings and appropriate technical terms.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Designing Year 4	Develop and communicate design ideas and decisions using annotated drawings and appropriate technical terms.	Develop and communicate boat design ideas and decisions using annotated drawings and appropriate technical terms.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Producing and implementing Year 3	Select, and safely use, appropriate components with given equipment to make a solution.	Select, and safely use, appropriate components with given equipment to make a boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Producing and implementing Year 4	Select, and safely use, appropriate components and equipment to make solutions.	Select, and safely use, appropriate components and equipment to make a boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Producing and implementing Year 5	Select, and apply, safe procedures when using components and equipment to make solutions.	Select, and apply, safe procedures when using components and equipment to make boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Evaluating Year 3	Use criteria to evaluate design processes and solutions developed.	Use criteria to evaluate boat design processes and solutions developed to ensure it carries weight.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Evaluating Year 4	Use criteria to evaluate and justify simple design processes and solutions.	Use criteria to evaluate and justify simple boat design processes and solutions to ensure it carries weight.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Evaluating Year 5	Develop negotiated criteria to evaluate and justify design processes and solutions.	Develop negotiated criteria to evaluate boat design and justify design processes and solutions.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

Design Technologies, Processes and Production Skills			
Learning Area Outcomes	Content Organiser/key concepts	Content specific to Junior Crew related to key concepts	Activity/worksheet to assess concept
Collaborating & managing Year 3	Work collaboratively to safely plan and publish steps in a process.	Work collaboratively to safely plan and publish steps in the process of making a boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Collaborating & managing Year 4	Work collaboratively to safely plan and publish a sequence of steps.	Work collaboratively to safely plan and publish a sequence of steps to make a boat.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat
Collaborating & managing Year 5	Work collaboratively to safely develop and publish basic plans, including sequencing of steps.	Work collaboratively to safely develop and publish basic boat design plans, including sequencing of steps.	Topic 3 - Keep your boat afloat • Major Activity 1 – Float a boat

Patrol Boat Visitation

Depending on availability, demand and other seasonal commitments the Department's Marine Officers may be available for school visits. Officers may be available to attend the school with marine safety equipment to give short sessions on basic boating safety that would support the Junior Crew program. Please see the Patrol Boat Visitation notes on the Junior Crew Pack CD for more information.

The Department is confident the activities contained within this pack will assist you in maintaining a high level of program delivery and assessment. Assistance and additional information is available through the Department of Transport's Safety Education Branch.

Contact details

Marine Education Boatshed

Corner of Pier Street and Riverside Road

East Fremantle, 6158

Phone: (08) 9339 7851

Website: *www.transport.wa.gov.au/imarine/juniorcrew*

NOTES

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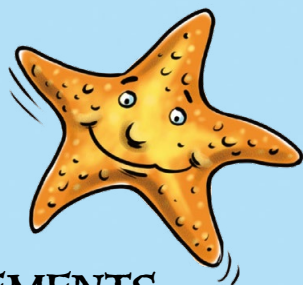_____

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Further information

Visit the following websites for further information:

Junior Crew website: ....*www.transport.wa.gov.au/imarine/juniorcrew*

Department of Transport..*www.transport.wa.gov.au/imarine/15830.asp*

Boat Safe Kids ....*www.boatsafe.com/kids/index.htm*

Kids and Water...*www.wetpaper.com.au/kids&water*

Scootle:...*www.scootle.edu.au*
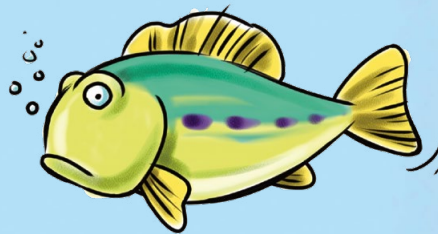
Further learning opportunities

Boat Safe Kids ....*www.boatsafe.com/kids/index.htm*

Bureau of Meteorology .... *www.bom.gov.au*

Acknowledgements