

Pack # 1 Montessori learning ideas

THE FMS LEARNING FROM HOME SERIES PACK FOR
Upper Primary (9-12 years)



Forestville
MONTESSORI School
Thriving beyond...

Released Wednesday 1st April 2020

A Message from Denice and Anthony:

Hello 9-12 Parents,

If you are self-isolating, how's life as you transition your children to this temporary arrangement of learning from home? It's lovely seeing the children who continue to attend school. For all the children at home, we are missing you very much. To all our parents, we are here for you. This is not home schooling. We are intentionally not being prescriptive and providing structured daily schedules about learning at home because as a family, you will be making choices that work for you.

We will probably never again live through a time such as this. We are all slowing down and reflecting on what matters in our lives. In the video series we made last year, Sue Birdsall, the Founder of Forestville Montessori School had this to say about what's important about a Montessori education:

"It's the best environment they could ever have. The way they are given knowledge, acquire knowledge, learn about the universe, the world and what's important in society and get to know what their place is and how they can contribute."

There has never been a more poignant time for us to recognise the profound impact of a Montessori education for peace and for life.

We're providing your children with some learning ideas. They will have many more ideas of their own so let them go with the flow. Whatever comes of this unfathomable epidemic, there will be much learning and we will all be wiser.

This is a moment in time it is temporary and together we will get through this.

Denice Scala
Principal

Anthony Milano
Deputy Principal
Head of Montessori Teaching & Learning

From Your Teachers:

Hello 9-12 Children,

Are you ready for some more self-directed learning ideas? Here's a pack to help you expand your horizons and get you thinking outside the box.

This pack is designed to be used over an extended time frame. There are some big ideas for you to think about here. There is not an expectation that you will finish all the activities, but we would like you to go deeply into something that you are curious about. Children and families are encouraged to do what they can do, when they can, while still having time for other important learning and relaxation within the family home.

Please contact the school office if you would like printed copies or you require exercise books or stationery (via email), so one can be made available for collection at Reception.

We encourage students to record their home learning in their journal. Keep all other loose work in a folder. We'll also be sending out sport videos that you can use to keep fit at home. Why not do these with your parents for some family fun?

We're looking forward to some virtual catch-ups before the holidays to hear how your learning at home is going.

Remember all the important things we shared about safe hygiene and looking after each other.

Anthony, Lauren & Tamlin
Upper-Primary (9-12 years) Staff

1 Geography

The Composition of the Earth

Review and investigate the Layers of the Earth. You may have started this work in class:

- Investigate these terms: barysphere, lithosphere, hydrosphere and atmosphere. Write a simple definition eg. “The hydrosphere is all the water on earth – oceans, seas, lakes, rivers and frozen water including ice sheets and glaciers.”
- Make a poster or booklet. Draw a simple diagram of each layer. Label it and place your definition with it. In magazines or books find examples of each eg. lithosphere – mountains, hills, plains, grasslands. Add these to your work.

Investigate ‘The Force of Gravity’

Watch the following video:

https://www.youtube.com/watch?v=EwY6p-r_hyU

- Try one of the experiments in the video. Write the experiment as a ‘Procedural Text’
 - i. Title of Experiment
 - ii. You Will Need (Make a list)
 - iii. Method (Write as a step by step what you need to do.
 - iv. Conclusion: What did you find out?
- Find 5 super interesting facts about the Core and the Mantle. Write these facts around your picture.

Research “Sir Isaac Newton”

In the video you get to meet Sir Isaac Newton.

- Find out a bit more about him. Retell his story in your own words and pictures. This could be a little story book. What did he discover and why is it important?

Investigate the Core and Mantle of the Earth

- Find a picture of the Earth that shows the Core and the Mantle. On a poster, draw and label your own picture.
- Find 5 super interesting facts about the Core and the Mantle. Write these facts around your picture.

What is the earth’s surface and why does it change?

- Visit the resources and lesson activities on “Inquisitive”. Use “Earth’s Surface” resources to clarify your research and thinking. Be creative: make your own booklets or posters to show your understanding. <http://inq.co/class/njg> / Access Code: 2134

How can rocks and fossils show us how the earth’s surface has changed?

- Visit the resources and lesson activities on “Inquisitive”. Use “How can rocks and fossils show us how the earth’s surface has changed?” resources to clarify your research and thinking. Be creative: make your own booklets or posters to show your understanding. <http://inq.co/class/njg> / Access Code: 2134

Geography

The Study of Mountains

A number of children have started this work in class. Continue from where you are up to.

What is a mountain?

- Using a variety of resources, write a clear definition that answers the question “What is a mountain?” Find pictures to add to your page.

How are mountains formed?

- Investigate and research how mountains are formed. The main formations are: Dome, Block, Fold and Volcanic. Draw a picture of each. Clearly label and describe each one. Use coloured plasticine to make a small model of each formation for a diorama.

What are the parts of a mountain?

- Investigate and research the parts of a mountain. Draw a cut-through picture of a mountain. Clearly label the parts. Write a definition for each part.

Where are mountains located on earth?

- Investigate and research where mountains are located on earth. This can include individual mountains and mountain ranges. Use an Atlas to locate the major mountain ranges of the world. On a map of the world, mark in the major mountain ranges. Make a chart of these major mountain ranges.

Major Mountain Range

Continent

Tallest mountain on the continent

What is the biome of a mountain?

- Investigate and research the biome of one of the mountains you have identified eg. Mount Everest. The biome includes: flora, fauna, climate and human activity.
- Choose a mountain from your list and put together a project that shows everything that you have learnt eg. Mt Everest. How was it formed? What are the parts of Mt Everest? Where is it located? What is the biome of Mt. Everest like?
- Visit the resources and lesson activities on “Inquisitive”. Use the resource “Choose Your Biome” to clarify your research and thinking. <http://inq.co/class/njg> / Access Code: 2134

Geography

Continent Study - resources

Please continue your continent study. In the Starter Pack you were asked to choose from the following continents: Australia and Oceania, Asia, Africa, Europe, North or South America, or Antarctica. The study would include the following:

- draw a large map of the continent
- label the different countries
- label the capital cities
- find and label the land and water forms (eg mountains, deserts, lakes, rivers, oceans and seas)
- draw and label the national flag of the different countries
- Include other interesting facts about the country eg. What are the human features of a particular country? What are the cultural aspects of a country - food, shelter, transport, clothing, art & music, and traditions

Visit the 'Map of the World' activity on Inquisitive

- Visit the resources and lesson activities on "Inquisitive". Use the resource "Map of the World" to clarify your research and thinking. <http://inq.co/class/njg> / Access Code: 2134





Reading and writing: Choose your activity



<p>Summarising</p> <p>Summarise the chapter from the book that you are reading at the moment.</p> <p>Can you summarise it in less than 100 words?</p>	<p>Create the character</p> <p>Draw a picture of a character from the book that you are reading at the moment.</p> <ul style="list-style-type: none"> • Label your drawing • Add some speech bubbles 	<p>Book review</p> <p>Review the book you are currently reading at the moment.</p> <ul style="list-style-type: none"> • Did you like the book? Why? Why not? • What was the best part? • Would you recommend the book to other readers? Why? Why not? 	<p>What's cooking?</p> <p>Find a new recipe to prepare as dinner for your family</p>
<p>Space or Ocean?</p> <p>Write a creative short story about living in outer space or living under the water. Who are the characters? What problem do they get into? How is the problem resolved? Write for 20 minutes.</p>	<p>Write a 'diamante' poem</p> <p>Diamante poems are seven lines long. The first and the last line have just one word. The second and sixth lines have two words. The third and fifth lines have three words. And the fourth line has four words. Lines 1, 4, and 7 have nouns. Lines 2 and 6 have adjectives. Lines 3 and 5 have verbs.</p>	<p>Qiz - Watch BTN www.abc.net.au/btn Or live Tuesday 10am ABC Me</p> <p>Re-watch one segment and write 4-7 quiz questions for your family to answer.</p>	<p>Menu</p> <p>Research and create a special dinner menu for one night this week. You can only use ingredients that are available in your pantry, refrigerator and freezer.</p>
<p>Code breaker</p> <p>Make a number code for the letters of the alphabet and write words using the code. For example, A=1, B=2, C=3, D=4. Write a sentence and ask someone in your family to decode it.</p>	<p>Etymology Using the following link www.etymonline.com</p> <p>Choose 10 words from a story you are reading. Using the link find the origin of the word. Write the word, identify the part of speech, and summarise the meaning.</p>	<p>Calm space</p> <p>Draw or list the 'tools' at home that help you to be calm at home. For example, 5 minutes in a quiet space, run around the back yard, throw a ball. Create a poster that shows the 5 ways you can calm down.</p>	<p>Gratitude journal</p> <p>Keep a gratitude journal. Each day write down three things you are grateful for.</p>
<p>News extra</p> <p>Write a newspaper article about something that you have heard on the news or your family is talking about.</p>	<p>Inventions www.monstersupplies.org</p> <p>Browse the Monster Supply Shop. Invent a new product, design and label it with instructions.</p>	<p>Did you know?</p> <p>What else can you use a spoon for? Create a list of the 10 lesser known uses for spoons. Illustrate each use.</p>	<p>Go to Pobble www.pobble365.com</p> <p>There is a new image to explore everyday! Choose a few activities that stir your imagination!</p>
<p>Fact or fiction?</p> <p>Find 5 facts from a non-fiction text. Develop 5 questions for further investigation - start with Who? What? Where? When? Why? And How? Find the answers to these questions.</p>	<p>Predicting - Watch BTN www.abc.net.au/btn Or live Tuesday 10am ABC Me</p> <p>Before you press play write down 5 things that you predict might happen in the segment..</p>	<p>10 Questions</p> <p>If you could meet your favourite book character, what are 10 questions you might ask them? Record your questions and answers.</p>	<p>Word swap</p> <p>Write out a paragraph from a book you are reading.</p> <ul style="list-style-type: none"> • Substitute 3 adjectives with synonyms • Substitute 3 adjectives with antonyms.

Word study

Homophones

1. *Read aloud the poem:*

Wood you believe that I didn't no
About homophones until too daze ago?
That day in hour class in groups of for,
We had to come up with won or more.

Mary new six; enough to pass,
but my ate homophones lead the class.
Then a thought ran threw my head,
"Urn a living from homophones", it said.

I guess I just sat and stared into space.
My hole life seamed to fall into place.
Our school's principle happened to come buy,
and asked about the look in my I.

"Sir," said I as bowled as could bee,
"My future rode I clearly see."
"Sun," he said, move write ahead,
Set sail on your coarse. Don't be misled."

I herd that gnus with grate delight.
I will study homophones both day and knight.
For weeks and months, through thick oar thin,
I'll pursue my goal. Eye no aisle win.

George E. Coon

- Record this poem on a piece of paper in beautiful handwriting, or type if you have access to a keyboard. As you copy, correct the homophones. Remember, homophones are words having the same pronunciation but different meanings, origins, or spelling.
- Create your own story, poem or rhyme with deliberate homophone mistakes. Write a draft then type and print out for a family member to decode.

3

Word study

Homonyms

Write the following double homonyms on small cards:

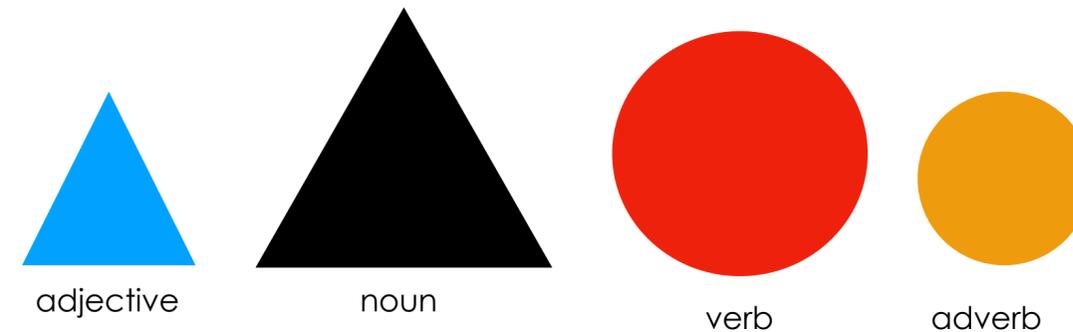


- **Invite** a family member and distribute the label cards. Read each of the labels and ask each other to bring or do whatever the label says.
- **Write** sentence labels for each word above, underlining the homonym in red.
- **Match** the labels to the sentence labels.
- **Read** this definition:

**Homonym comes from the Greek word 'homosonyma' which means 'same name'.
Homonym means 'same name'.**

- **Copy** the definition. Can you expand and refine the definition. Find and make a list other words that are homonyms.

- **Use** the words on your list to write 2 sentences for each word. Underline the homonym in red.
- **Above** each homonym draw one of the following 'Grammar Symbols':



- **Challenge:** Turn your work into a 'Homonym' book or poster. Think of more homonym examples. Create more sentences, underlining the homonym(s) and matching it to the appropriate grammar function symbol. Major challenge is to write sentences with the homonym being an adverb or adjective. Have fun!



History



Second Timeline of Human Beings

A number of children have been presented with the timeline and have been involved in discussions about the pictures on the timeline and how they relate to the human beings' fundamental needs. This timeline covers pre-history and recorded history.

Research suggestions:

- Different types of vegetation appeared in some places in the Northern Hemisphere when the earth warmed up: tundra, steppe, pine forest and oak forest. Research what these terms mean in relation to when the early humans appeared.
- In your own words write a definition for each term.
- At the top of the timeline you find the following terms for time periods: Upper Palaeolithic, Transitional and Neolithic, Metal. Research one of these time periods. Write a simple definition. List important plants and animals that were around during the time period.
- Study one of the following cultures on the timeline: Perigordian, Solutrean or Magdalenian. Investigate how they met their fundamental Needs for shelter, transport, food, clothing, community, arts and culture. Draw a chart with words and pictures that shows each way they met their fundamental needs.
- Investigate early human tools from the change from stone making to metal making tools. You might like to present this as a timeline.
- Investigate the Ice Age. What happened? Who did it effect? What happened to the plants and animals. How long did it last? etc.

History Question Charts

A number of children have listened to an original story about the Ancient Egyptians and their art. This story answered the question, 'What was their art like?' from the intellectual and spiritual aspects of the culture.

The story talked about style and how Egyptian art is presented very orderly, the surface is divided into horizontal strips or rows and a figure will stand on that line which represents the ground. They accepted three ways of showing a figure; from the front, from the side or from the top looking down but that was it. The children were shown images of jewellery and art during the story.

Research suggestions:

- Study the art and style of Ancient Egypt
- Study the art and style of the Ancient Greeks
- Study the art and style of the Romans.

Youtube clips:

https://www.youtube.com/watch?v=XdXXK_PTKUU

https://www.youtube.com/watch?v=A_8yPgC9zQc

- Present your research as a poster or booklet.

History

4

Migration

A number of children have been presented with the story about the migration of people. In the story we have talked about deserts and glaciers and the way they have affected the movement of people. The children have been shown impressionistic charts including:

- Displacement Migration (non-violent movement, passive).
- Horde Migration (smaller groups of people have joined with other groups and become one identity)
- Infiltration and Fusion (smaller groups of people have come together but haven't lost their own identities)
- Breaking the Wall (invasion)
- Slash and Burn (a group of people clearing the land for agriculture and then moving to another location)
- Map of the world (showing where populations might have settled and the spread of vegetation on earth)
- Migration by water (people migrating by ship or raft)

Research suggestions:

- Children can research any of these types of migration. They can present it beautifully as a booklet, poster, or chart.
- Research on refugees. Ask: Who are these people? Where have they come from? Where are they heading? Why have they left their homeland? How did they travel? Check out these websites: unrefugees.org and ed.ted.com "What does it mean to be a refugee?"
- Research on asylum seekers. Ask: Who are these people? Where have they come from? Where are they heading? Why have they left their homeland? How did they travel? What are they seeking?
- Visit the resources and lesson activities on "Inquisitive". Use the resources to clarify your research and thinking. Be creative: make your own booklets or posters to show your understanding. <http://inq.co/class/njg> / Access Code: 2134

5 Understanding time

The following activities are added to help those children who are struggling to read an analog clock.

Time on the Hour:

You will need: an analogue clock or watch with numerals.

- The clock has 2 hands. The hour hand and the minute hand. The clock is divided into 12 equal parts, the 12 equal parts are called hours. When the minute hand moves around, the hour hand moves from one number to the next. There are 60 seconds in a minute and there are 60 minutes in an hour.
- Child practices making all the hour times on the clock.
- Make a clock using two paper plates, a split pin and cardboard arms. Divide both paper plates into 12 sections. On one plate write: 5, 10, 15, 20, 25, 30, etc. to 60. On the second plate write: 1 to 12. Cut this plate on the divisions to make flaps (see photo). Attach the clock arms with a split pin.



Time: 5 past, 10 past, 15 past etc:

If the child has made a clock of their own or have been practicing their hour time, introduce past time.

- Child makes an hour time on the clock, for example, 2 o'clock. Then, the child counts the minute dashes on the clock to 5 minutes past. "This is 5 minutes past 2 or 2:05".
- Child practices all the way around the clock until they reach 3 o'clock.

Time: Half past

- Ask the child to imagine the clock face as a whole. The clock face could be divided into pieces or fractions.
- Move the minute hand to half past 3.
- Ask the child "how many minutes past 3?" "30".
- "The time has been divided into half, we could say that it is half past 3".
- Child can make their own times on the clock using half past and say it out loud.

Time: Quarter Past

- Move the minute hand to the 3 on the clock and move the hour hand to the 4. "What time is it now?" "4:15".
- "If we think about our clock face as a whole, we would say that we have broken it into fourths or quarters. This is quarter past 4".
- Child practices with quarter past.

5

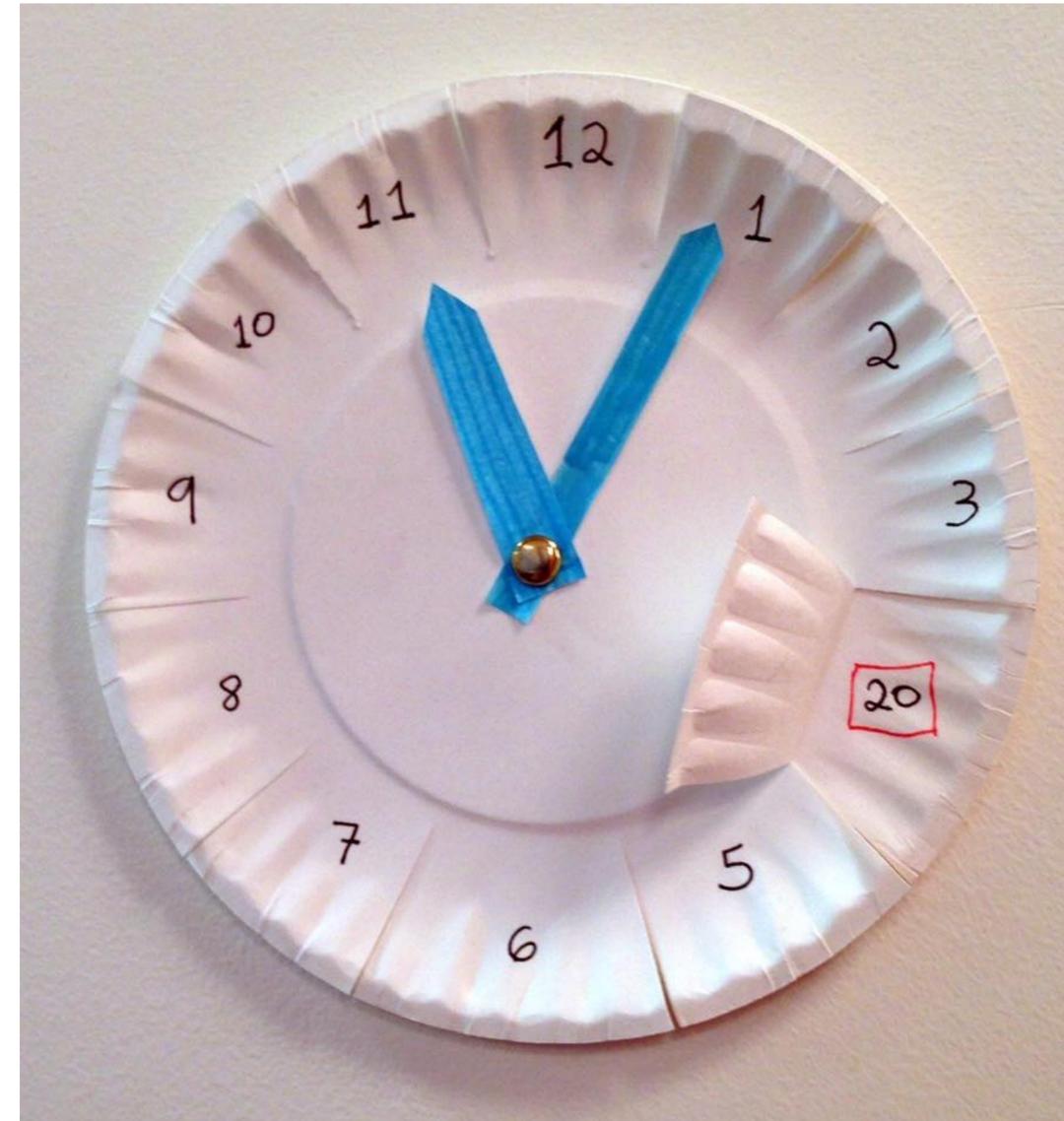
Understanding time

Time: Quarter to

- Move the hour hand to 4 and the minute hand to the 9. “What time is it now?” “4:45.
- “If we think about the clock face as a whole, it has been divided into three quarters”. “it is quarter to 5 or 4:45”.
- Child practices making quarter to times on the clock.

Other suggestions for time:

- Telling and reading 24-hour time.
- Calendar (Months of the year, days of the week and their origins).
- Childs personal timeline of life.





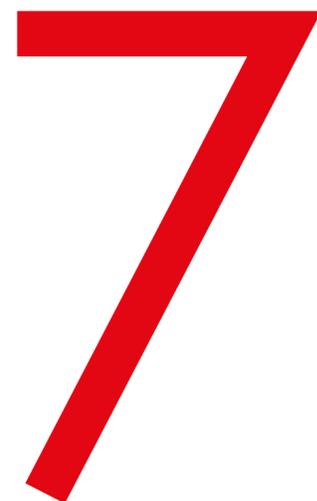
Daily Physical Activity



<p align="center">Daily Physical Activity</p> <p align="center">Aim for 60 minutes or more a day of activities you find fun Feel free to mix and match or make up your own ones and share what you have done</p>			
<p align="center">Be inspired</p> <p>Get active and try an awesome sports activity or dance routine designed by the children of FMS https://www.youtube.com/channel/UCWdZGk7ixos1LEzEcJ1C0Xw</p>	<p align="center">Rainy day</p> <p>Blow up a balloon, scrunch up a ball of paper, grab some empty boxes and see what you come up with.</p>	<p align="center">Find Your Fun</p> <p>Go online and discover fun ways to move your body www.gonoodle.com www.youtube.com/user/CosmicKidsYoga</p>	<p align="center">Let's Dance</p> <p>Put on some music and move. Make up a game, design a routine or dance like no one is watching!</p>
<p align="center">The Classic</p> <p>Grab some fresh air and go for a walk, jog or run.</p>	<p align="center">Circuit Challenge</p> <p>Make a Circuit in your house or garden and challenge your whole family. Set up activity stations. Set a timer – try 30 seconds for each station Rotate around your stations</p>	<p align="center">Chart your daily activity</p> <p>Record how many minutes you ran, danced or exercised for. Time yourself doing challenges and try to beat your own target. Make a chart or bar graph showing your achievements.</p>	<p align="center">On Your Bike</p> <p>Find some wide-open space to ride your bike, scooter, skateboard, roller blades or Unicycle!</p>
<p align="center">Help out and Get Healthy</p> <p>Taking out the bins, vacuum the house, clean the windows or get busy in the garden.</p>	<p align="center">Mission Impossible</p> <p>Design an Obstacle course where you can't touch any of the obstacles.</p>	<p align="center">Challenge 15</p> <p>Check out the daily FMS 15 minute activity challenge https://www.youtube.com/channel/UCWdZGk7ixos1LEzEcJ1C0Xw</p>	<p align="center">Terrific Teamwork</p> <p>Try volleyball or catch with your neighbour over the fence, arrange a virtual playdate and share a skill with a friend or teach your parents some dance moves and send a video to a family member.</p>



Everyday Art Challenge



<p align="center">Everyday Art Challenge</p> <p align="center">Try choosing a different activity each day from the selection or use them to inspire your own arty ideas. Where the activities reference an artist try finding an image of their work for inspiration or you could find an artist of your own choice.</p>			
<p align="center">Be inspired</p> <p>Try an art activity designed by the children of FMS https://www.youtube.com/channel/UCWdZGk7ixos1LEzEcJ1C0Xw</p>	<p align="center">Be at one with Nature</p> <p>Go outside, discover, collect, photograph or draw.</p>	<p align="center">Visit a gallery</p> <p>Go online and take a virtual walk around a gallery. Be inspired, research an artist or find an activity to complete.</p>	<p align="center">Find Your Flow</p> <p>The artist Kandinsky believed there was a relationship between sounds colours and shapes. Put on your favourite tunes or try a playlist of music from around the world and draw whatever the music makes you feel like drawing.</p>
<p align="center">Life is a Beach</p> <p>Sydney born Artist Ken Done created many bold and colourful paintings of the city's beaches. Take a journey through your old beach photos and make a bright and beautiful picture of your favourite one.</p>	<p align="center">Awesome Animals</p> <p>Picasso had a special relationship with his dog. Make a drawing of your own pet or favourite animal by taking a line for a walk around the page.</p>	<p align="center">Cool & Crafty</p> <p>Why not take some time to chill out and practice some origami, finger knitting or sewing</p>	<p align="center">Super Sketching</p> <p>Look at illustrations from your favourite books. Make your own comic strip or flip book.</p>
<p align="center">Be Original</p> <p>Create, paint, colour, smudge, join, stick, shade, mix, blend, sculpt, rub or just draw.</p>	<p align="center">Opposite Day</p> <p>Attempt a drawing with your opposite hand or Copy from a picture that is upside down</p>	<p align="center">Save the Planet</p> <p>Artist Tony Cragg makes giant pictures out of recycled materials. Try making your own interesting sculpture out of old junk... see how many uses you can find with a collect of toilet rolls</p>	<p align="center">Virtual Playdate</p> <p>Famous artists Vincent Van Gogh and Paul Gauguin were good friends. Get on a Video call to one of your friends and draw or paint a portrait of them... you never know one day may both be famous too!</p>



Mathematics

Prerequisites to Squaring: Sums using Squares and Cubes of Numbers

You will need: Squaring Paper, coloured pencils and paper

Addition:

- Colour in a 3 square and 5 square using the squaring paper attached using the correct colours from the bead cabinet. Cut them out and place on a table or mat.
- “I want to add these two squares together!”. Write the problem on grid paper: $3^2 + 5^2 =$
- “I can’t really add them because they are two squares, but I can work them out on paper!”.
- “What is the value of 3^2 ?”. “What is the value of 5^2 ?”.
- Record the values on paper and the final value. For example: $* + * = *$.
- “You can check your answer by counting the individual squares if you wish!”.

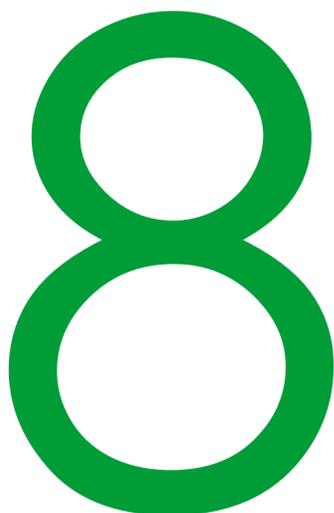
Subtraction:

- Colour in a 9 square using the squaring paper attached using the correct colours from the bead cabinet. Cut them out and place on a table or mat.
- “In subtraction I’m not going to place out that second amount, it is asking me to take it away!”. Write the problem on grid paper: $9^2 - 4^2 =$

- Colour in a 9 square using the squaring paper attached using the correct colours from the bead cabinet. Cut them out and place on a table or mat.
- “In subtraction I’m not going to place out that second amount, it is asking me to take it away!”. Write the problem on grid paper: $9^2 - 4^2 =$
- “You could use a piece of scrap paper to cover up 42 to show how much you would have left!”. “But we could also do this on paper!”.
- “What is the value of 9^2 ?”. “What is the value of 4^2 ?”.
- Record the values on paper and subtract to find the final value. For example: $* - * = *$.
- “You can check your answer by counting the individual squares if you wish!”.

Multiplication:

- “Let’s do multiplication, I want to look at 62 taken 4 times”. “I know to find the answer we could draw six of those squares and then put them together and that would make it possible to find the value”. “If you would like you can colour in six squares of 6 and add them together.....or we could do it on paper. Write the problem on grid paper: $6^2 \times 4 =$
- “What is the value of 6^2 ?”. Record on paper.
- “What is that value $\times 4$?”. Record on paper.



8

Mathematics

Division:

- “Let’s do division, I want to look at 53 or 5 cubed”. “I want to divide this 5 cubed into 5 using my skittles.” “I am going to be sharing out between 5 skittles, so I need to exchange the 5 cubed into 5 squares in order to share out”.
- Colour in 5 squares of 5 using a light blue pencil and cut out.
- “Do you remember what we say about the answer?”. “It is what one unit skittle receives”. “but that is not the only way we can work out our problem!”.
- “What is the value of 52?”. Record on paper and write the divided sign.
- “What is the final answer?”. Record on paper.

Extensions:

The children can make up their own problems for all the operations using the squaring paper or work it out on paper.

Racks and Tubes

Children can practice their Racks and Tubes work by making a problem and using the attached handout to work through the problem at home.

The Geometrical Form of Multiplication:

You will need:

- Grid paper with large squares
- Pencil
- Green, blue and red pencil
- Ruler

Use the problem below. Draw the Checkerboard and write all the working in each square:

$$\begin{array}{r} 3452 \\ \times 43 \\ \hline \end{array}$$

Extension:

Children can make up their own problems using a 2 digit multiplier or a 3 digit multiplier.



Mathematics

Fractions:

You will need:

- Fraction Equivalent Research Page 1
- Fraction Equivalent Research Page 2
- Reduction of Fractions to their Lowest Terms

Addition of fractions with different denominators

You will need:

- Template of the fraction pieces
- Red pencil for colouring in the fraction pieces
- Paper and pencil

“Today I want to take $\frac{1}{4}$ and I want to add $\frac{3}{8}$ ths”. Place these pieces down in front of you on a table or mat.

“But we can’t just add them together because they come from different families of fractions!”. “What do we already know about equivalent fractions?”. Can we exchange the $\frac{3}{8}$ ths for some amounts of the fourths?

“What could we exchange it for?”.

Combine the exchanged pieces and add together.

Record the problem and answer on a piece of grid paper.

Other problems:

$$\mathbf{\frac{1}{3} + \frac{2}{6}}$$

$$\mathbf{\frac{1}{2} + \frac{1}{6}}$$

$$\mathbf{\frac{1}{2} + \frac{2}{3}}$$

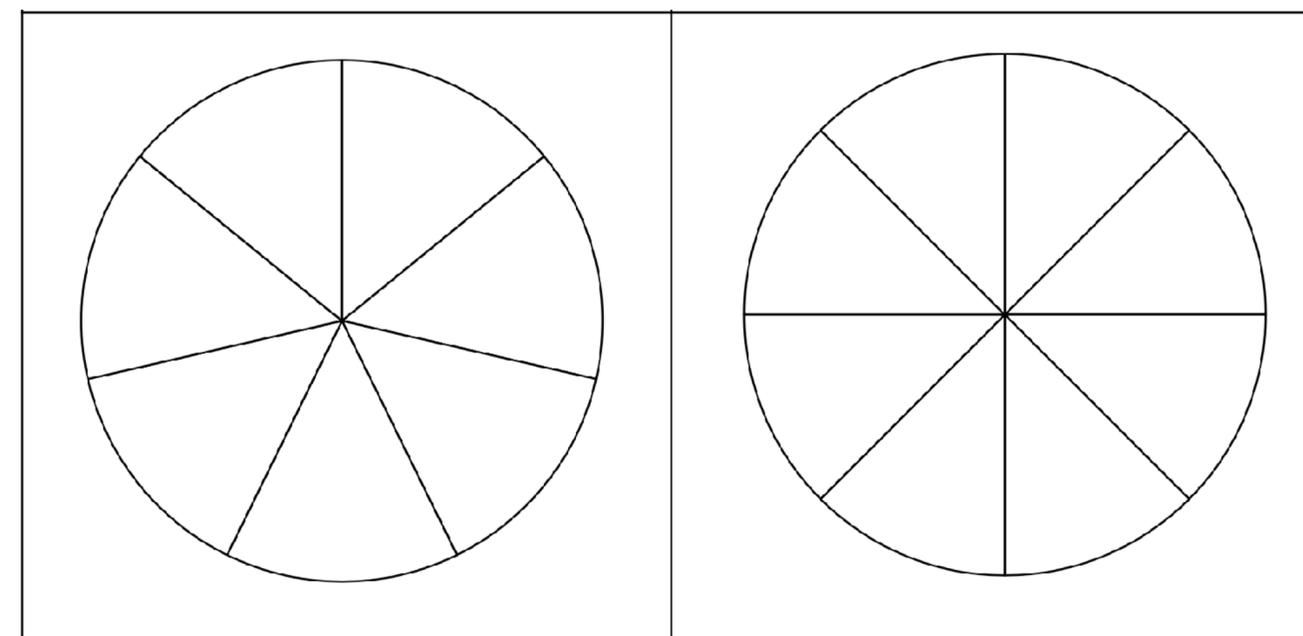
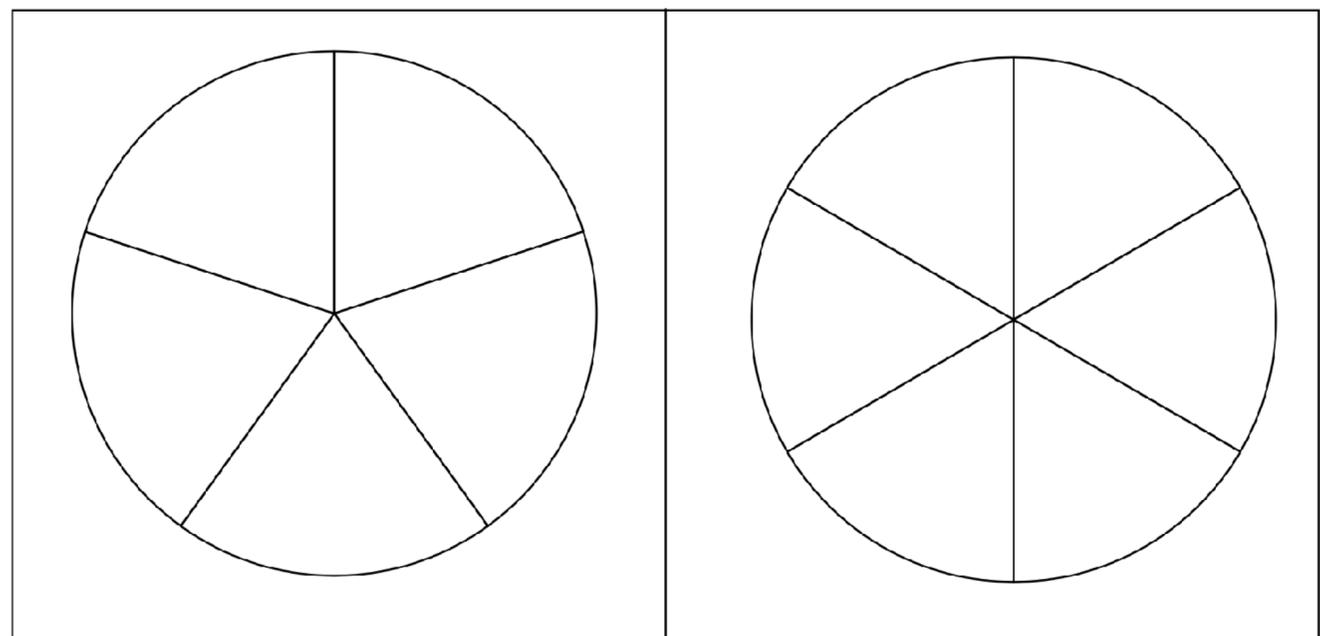
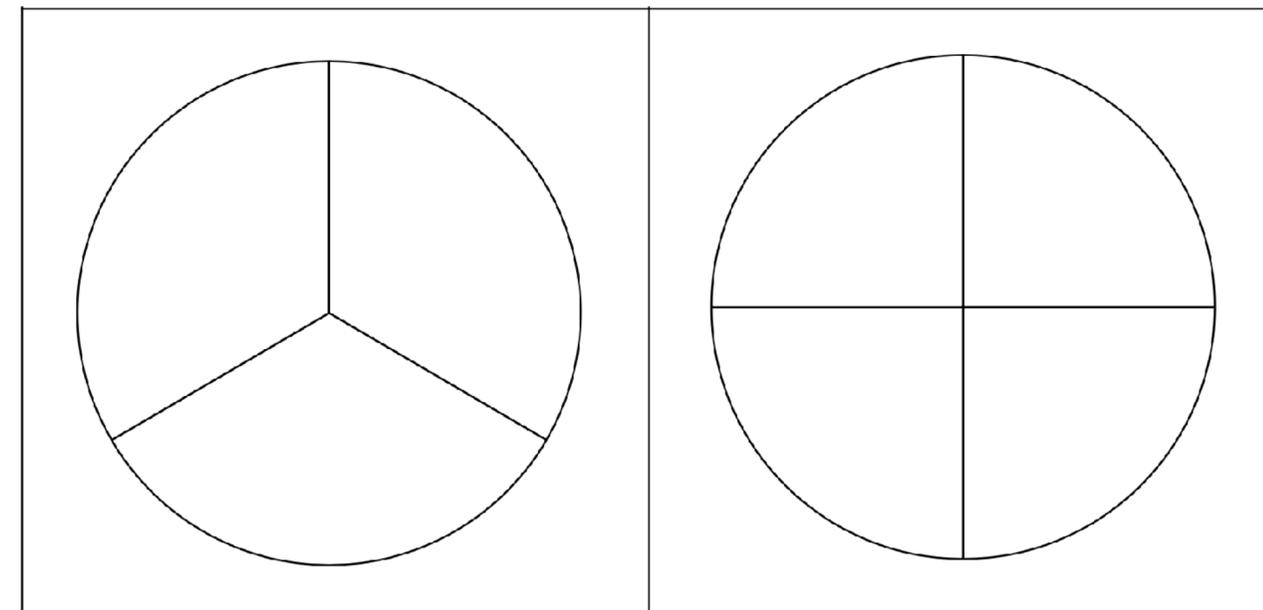
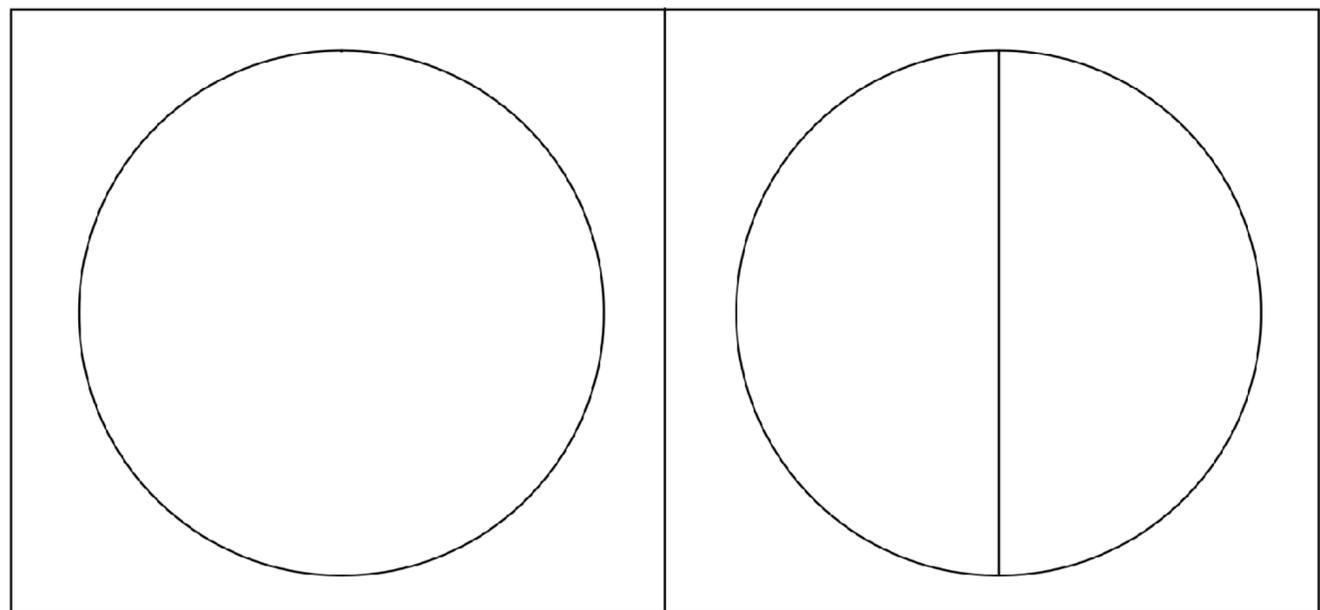
$$\mathbf{\frac{1}{4} + \frac{1}{4} + \frac{3}{9}}$$

Extension:

Children can create more problems for themselves.

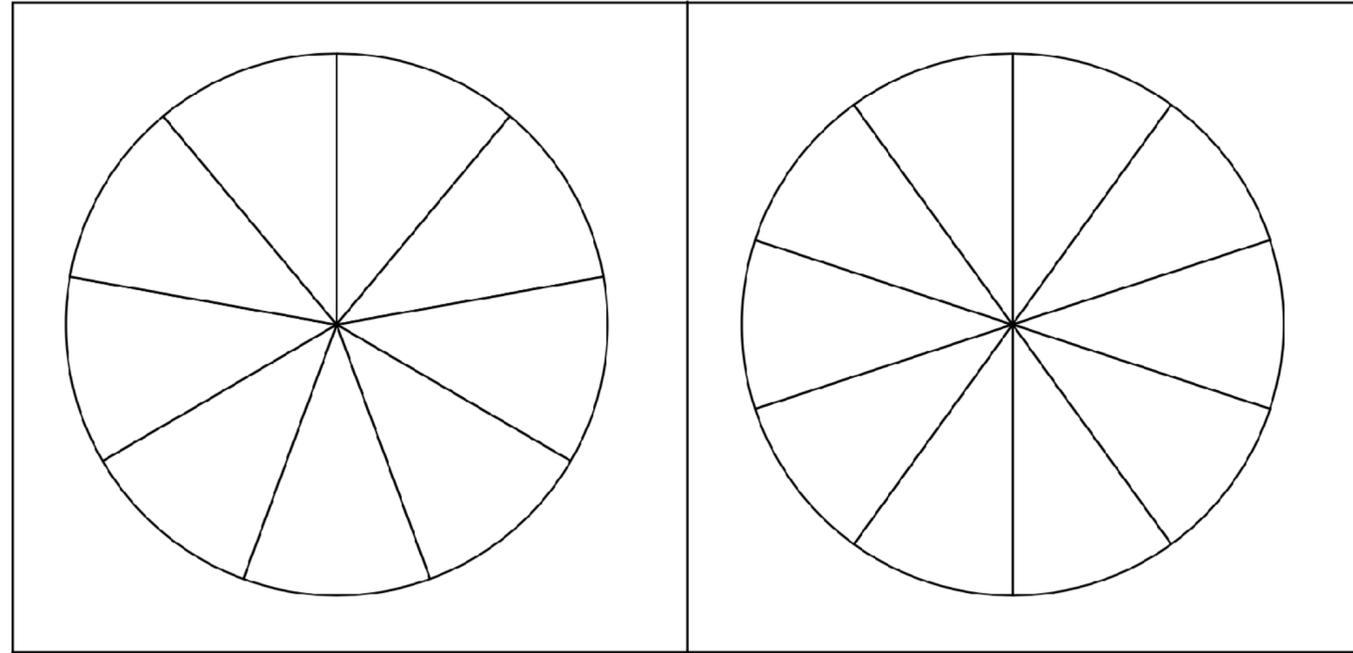
Appendices

9



Appendices

9

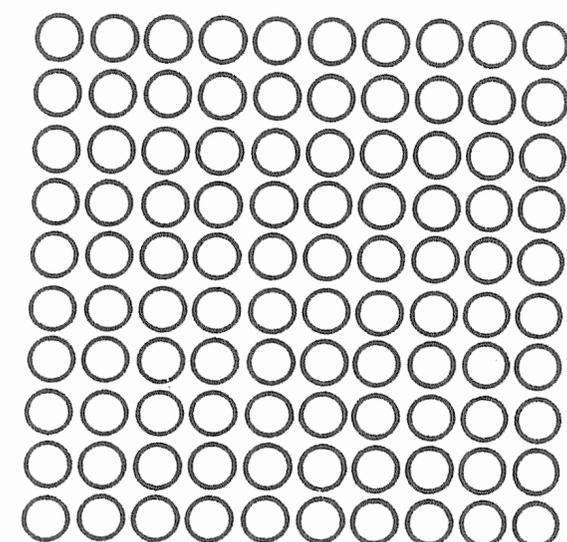
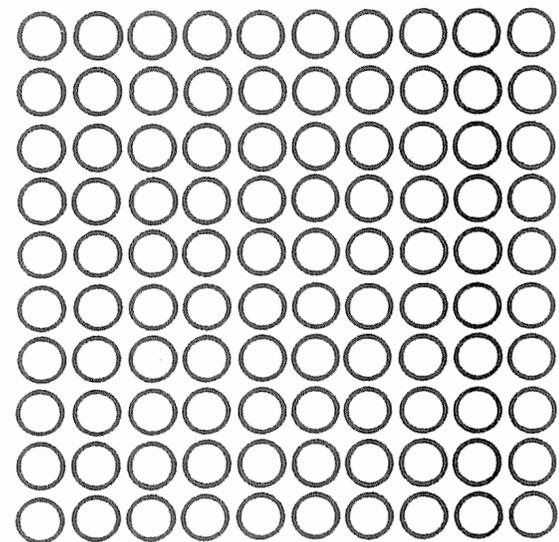
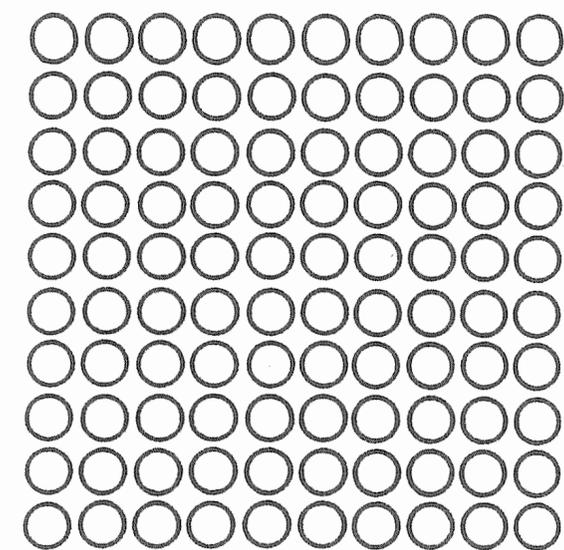
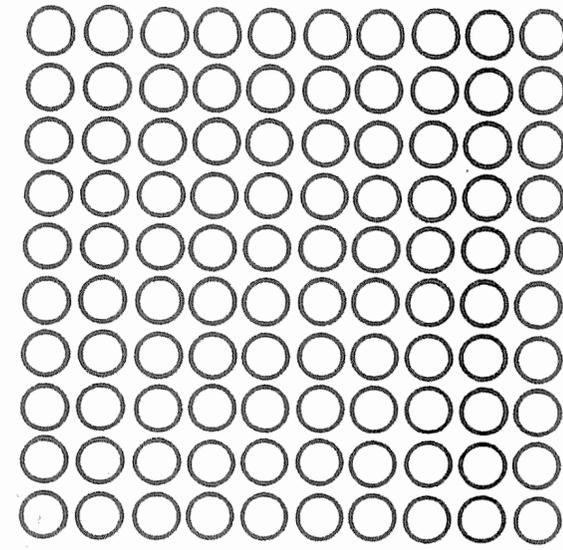
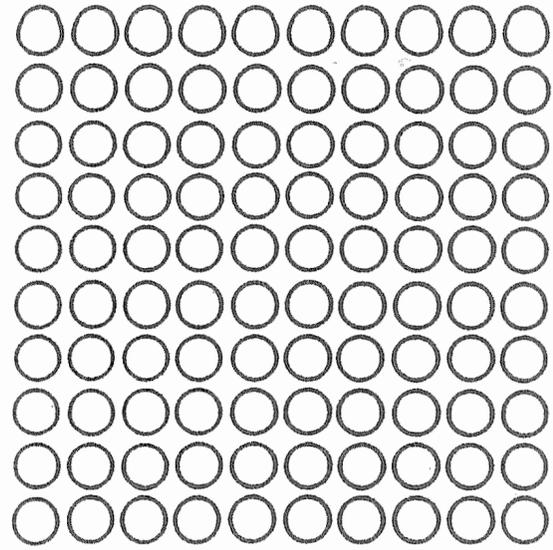




Appendices

9

Squaring Paper





Fraction Equivalent Research Page One

$\frac{1}{2}$	$\frac{5}{5}$	$\frac{2}{9}$
$\frac{2}{3}$	$\frac{6}{6}$	$\frac{3}{9}$
$\frac{1}{3}$	$\frac{1}{1}$	$\frac{4}{9}$
$\frac{2}{3}$	$\frac{2}{2}$	$\frac{5}{9}$
$\frac{3}{3}$	$\frac{3}{3}$	$\frac{6}{9}$
$\frac{1}{4}$	$\frac{4}{4}$	$\frac{7}{9}$
$\frac{2}{4}$	$\frac{5}{5}$	$\frac{8}{9}$
$\frac{3}{4}$	$\frac{2}{2}$	$\frac{9}{9}$
$\frac{4}{4}$	$\frac{2}{2}$	$\frac{1}{10}$
$\frac{1}{5}$	$\frac{8}{8}$	$\frac{2}{10}$
$\frac{2}{5}$	$\frac{8}{8}$	$\frac{3}{10}$
$\frac{3}{5}$	$\frac{3}{3}$	$\frac{4}{10}$
$\frac{4}{5}$	$\frac{4}{4}$	$\frac{5}{10}$
$\frac{5}{5}$	$\frac{5}{5}$	$\frac{6}{10}$
$\frac{1}{6}$	$\frac{6}{6}$	$\frac{7}{10}$
$\frac{2}{6}$	$\frac{8}{8}$	$\frac{8}{10}$
$\frac{3}{6}$	$\frac{8}{8}$	$\frac{9}{10}$
$\frac{4}{6}$	$\frac{1}{1}$	$\frac{10}{10}$

Fraction Equivalent Research Page Two	
$\frac{1}{2}$	$\frac{4}{6}$
$\frac{1}{3}$	$\frac{2}{8}$
$\frac{2}{3}$	$\frac{4}{8}$
$\frac{1}{4}$	$\frac{6}{8}$
$\frac{2}{4}$	$\frac{3}{9}$
$\frac{3}{4}$	$\frac{6}{9}$
$\frac{1}{5}$	$\frac{2}{10}$
$\frac{2}{5}$	$\frac{4}{10}$
$\frac{3}{5}$	$\frac{5}{10}$
$\frac{4}{5}$	$\frac{6}{10}$
$\frac{2}{6}$	$\frac{8}{10}$
$\frac{3}{6}$	

9

$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$
$\frac{2}{2} =$	$\frac{2}{3}$	$\frac{2}{4} =$	$\frac{2}{5}$	$\frac{2}{6} =$	$\frac{2}{7}$	$\frac{2}{8} =$	$\frac{2}{9}$	$\frac{2}{10} =$
	$\frac{3}{3} =$	$\frac{3}{4}$	$\frac{3}{5}$	$\frac{3}{6} =$	$\frac{3}{7}$	$\frac{3}{8}$	$\frac{3}{9} =$	$\frac{3}{10}$
		$\frac{4}{4} =$	$\frac{4}{5}$	$\frac{4}{6} =$	$\frac{4}{7}$	$\frac{4}{8} =$	$\frac{4}{9}$	$\frac{4}{10} =$
			$\frac{5}{5} =$	$\frac{5}{6}$	$\frac{5}{7}$	$\frac{5}{8}$	$\frac{5}{9}$	$\frac{5}{10} =$
				$\frac{6}{6} =$	$\frac{6}{7}$	$\frac{6}{8} =$	$\frac{6}{9} =$	$\frac{6}{10} =$
					$\frac{7}{7} =$	$\frac{7}{8}$	$\frac{7}{9}$	$\frac{7}{10}$
						$\frac{8}{8} =$	$\frac{8}{9}$	$\frac{8}{10} =$
							$\frac{9}{9} =$	$\frac{9}{10}$
								$\frac{10}{10} =$

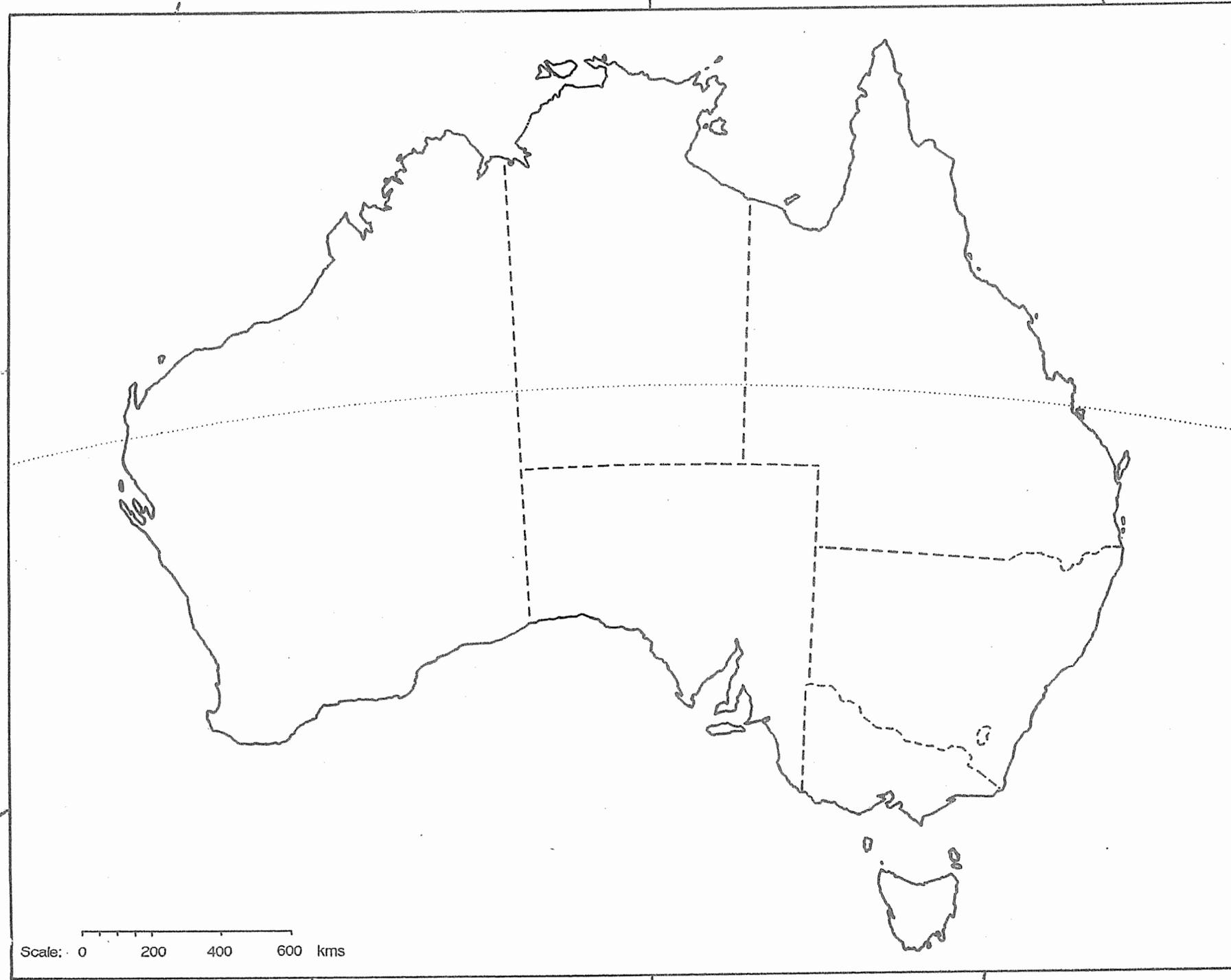
Reduction of Fractions
to Their Lowest Terms

9



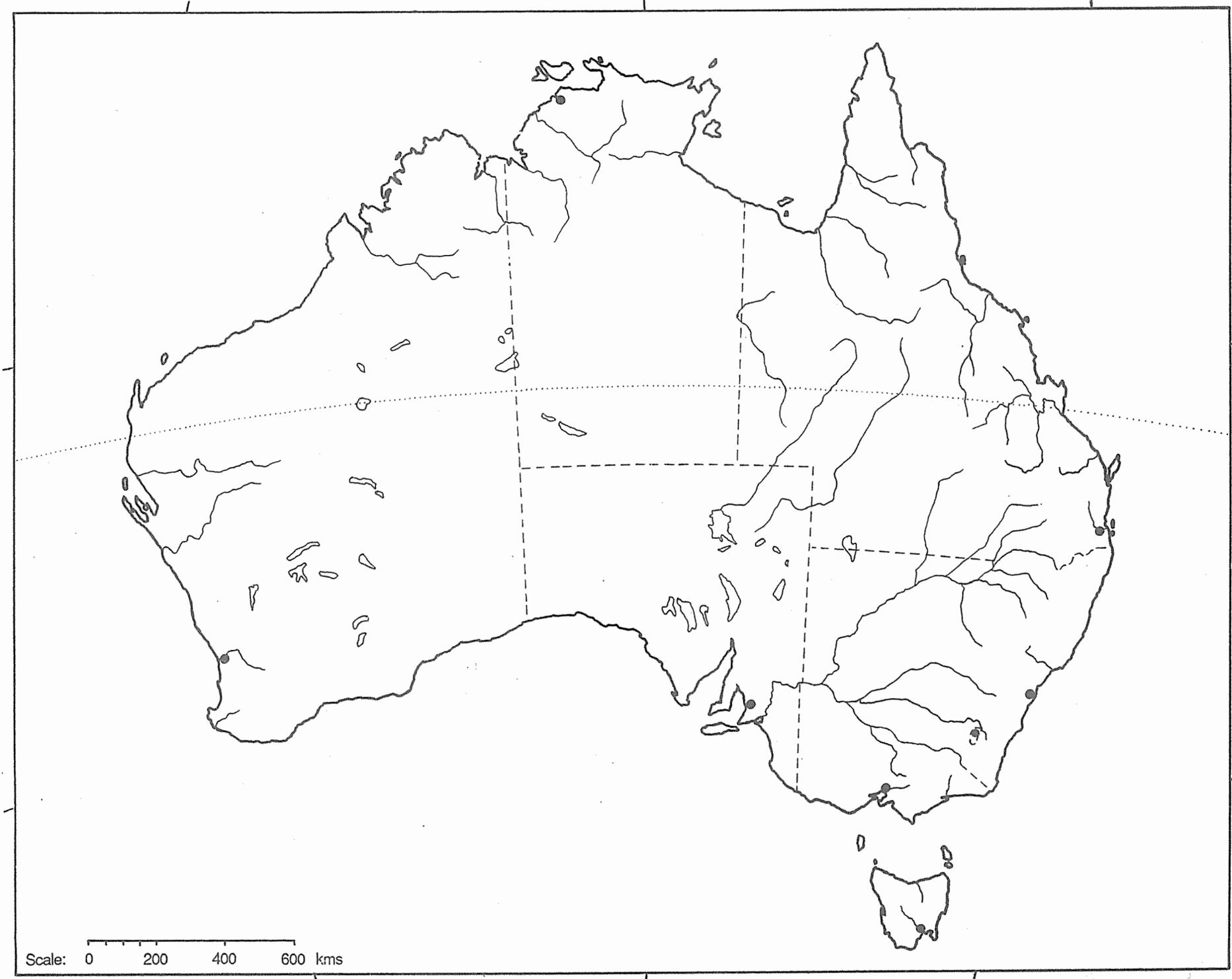
Blank Map Outlines for Geography and Asian Social Studies

5 Australia



Blank Map Outlines for Geography and Asian Social Studies

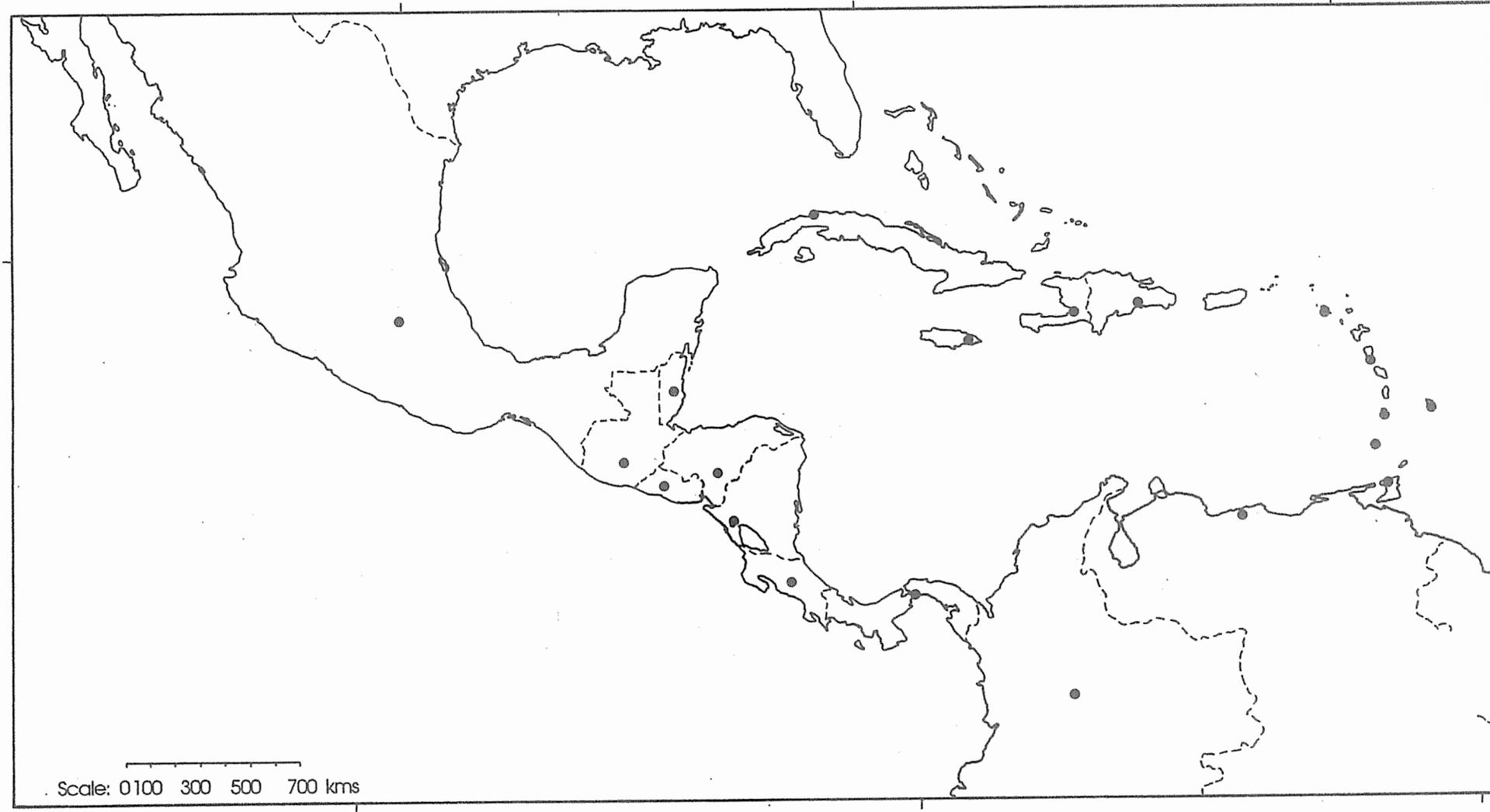
6 Australia



Paper Master  NSW DEPARTMENT OF EDUCATION  ISBN 0 7240 5431 6 © STATE OF NSW 1986

Blank Map Outlines for Geography and Asian Social Studies

36 Central America



Paper Master



NSW DEPARTMENT OF EDUCATION

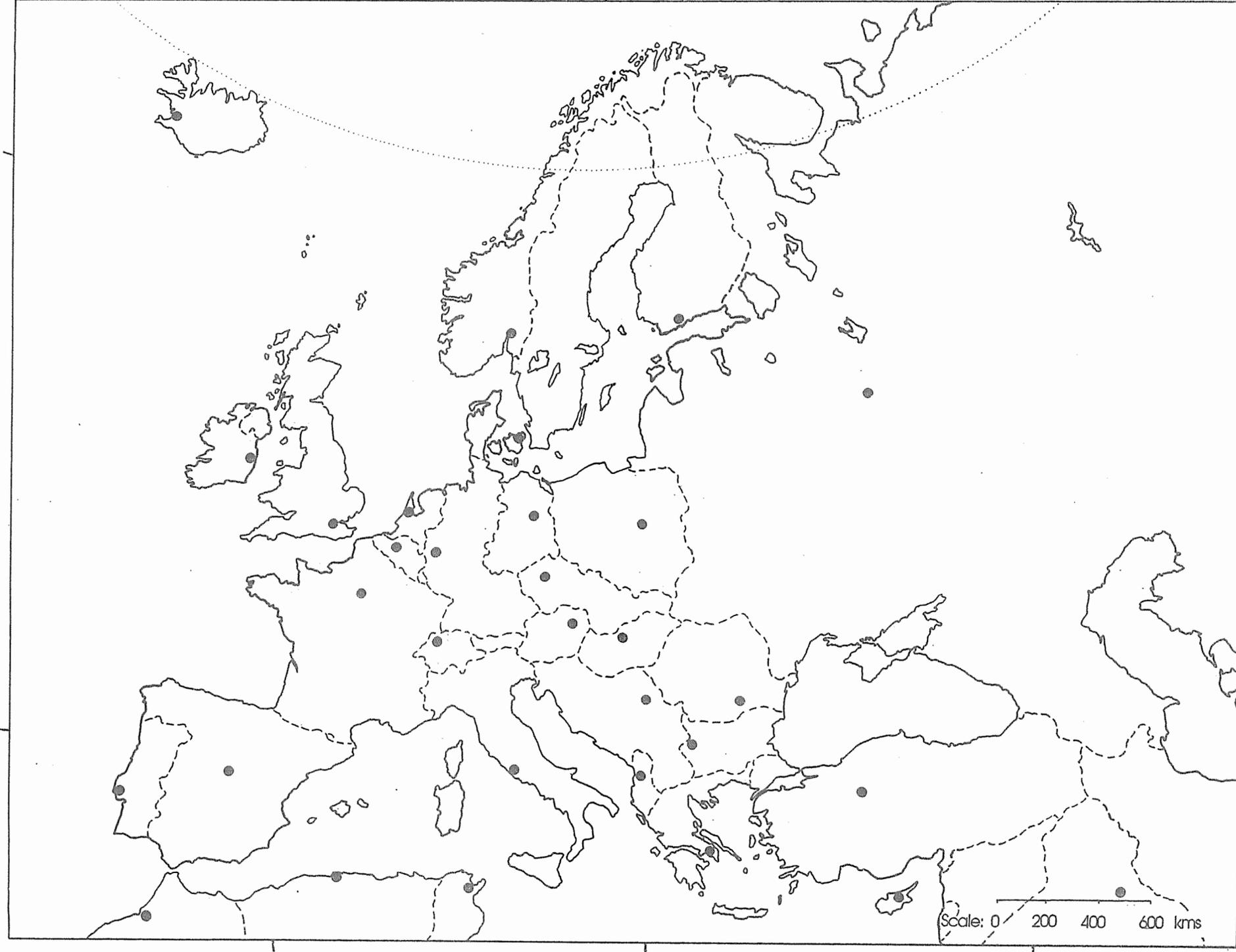


ISBN 0 7240 5431 6

© STATE OF NSW 1986



32 Europe



Paper Master



NSW DEPARTMENT OF EDUCATION



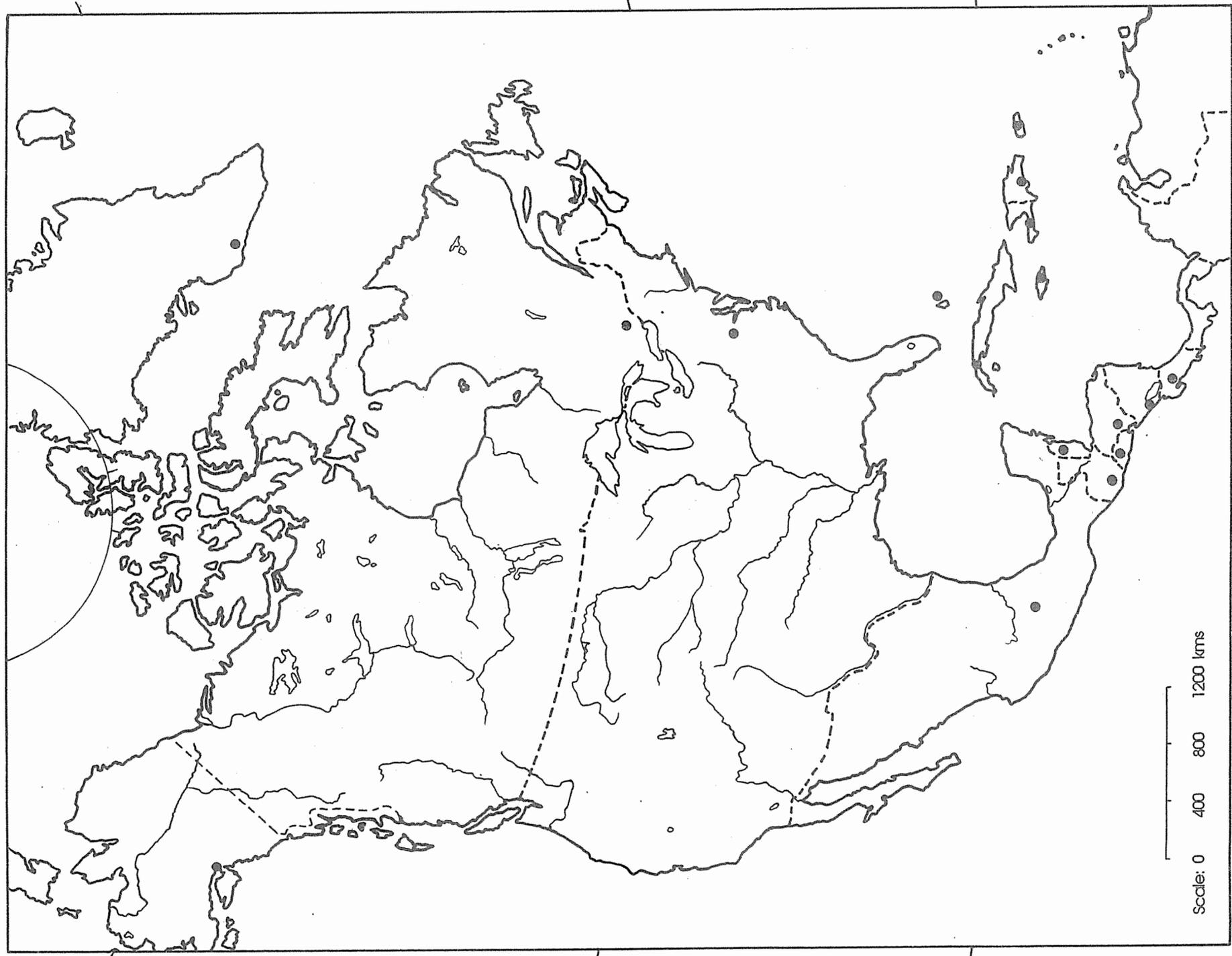
ISBN 0 7240 5431 6

© STATE OF NSW 1986



Blank Map Outlines for Geography and Asian Social Studies

34 North America



Paper Master



NSW DEPARTMENT OF EDUCATION



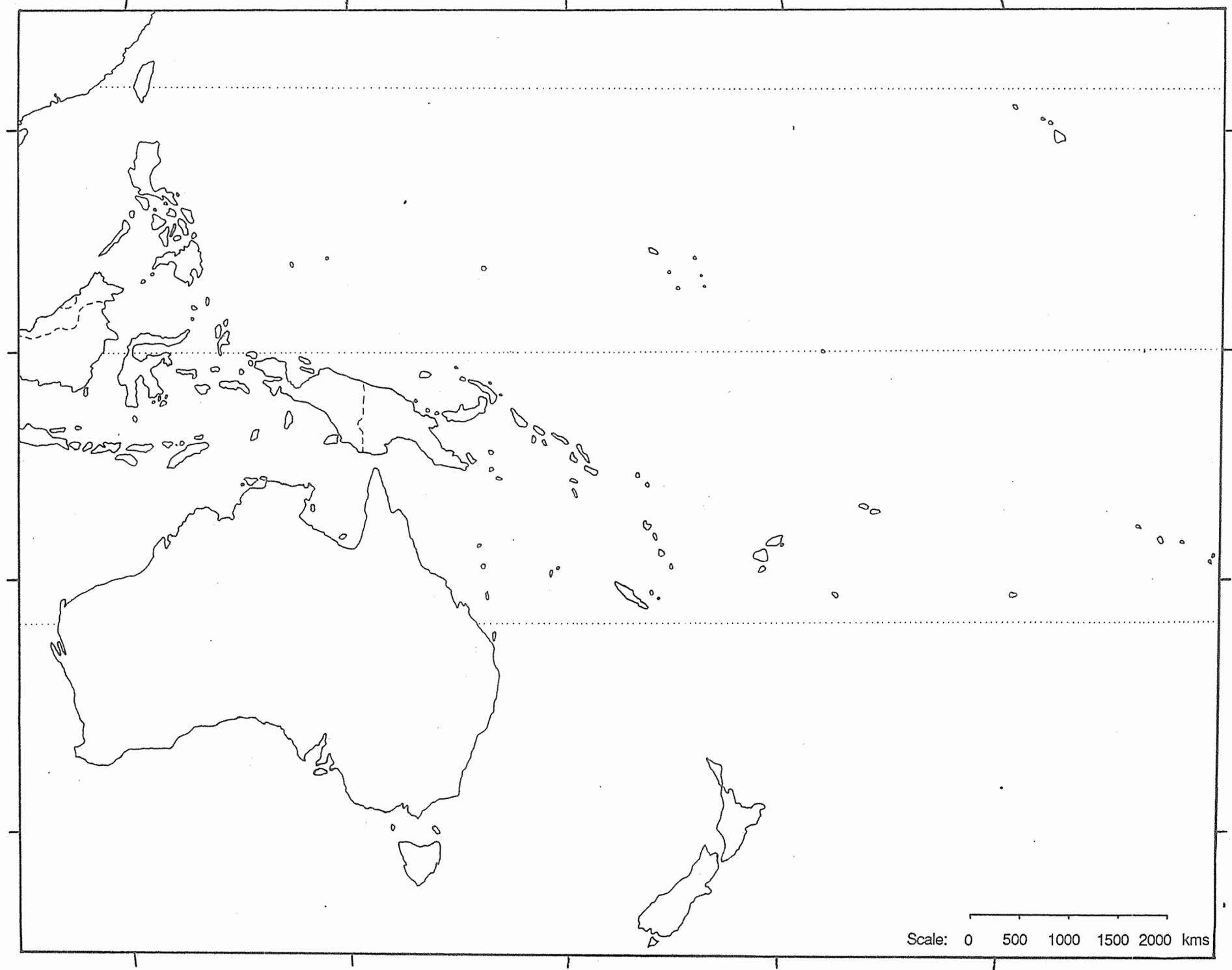
ISBN 0 7240 5431 6

© STATE OF NSW 1986



Blank Map Outlines for Geography and Asian Social Studies

14 The Southwest Pacific



Paper Master  NSW DEPARTMENT OF EDUCATION  ISBN 0 7240 5431 6 © STATE OF NSW 1986