# Outdoor nature moves NOTICE NATURE

Head outside and find a quiet location with enough space so you won't bump into each other.

- Reach up tall and strong like trees in the ngahere/forest.
- Bend down and touch your toes and Papatūānuku.
- Reach your arms out wide like the stars of Matariki.
- Curl up in a ball like te marama/the moon.
- Move like the waves in the moana/ocean.
- Fly like the pīwakawaka.
- Creep quietly like a kiwi.

- Run round and round like a cheeky kea.
- Reach up tall and strong like the trees in the ngahere/forest.
- Bend down and touch your toes and Papatūānuku.
- Lie down on Papatūānuku, eyes towards Rangi-nui (the sky), hands on your tummy, and breathe.

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#### Students will need:

- sketch nature: piece of card, rubber and pencil
- nature rock art: small rock, paints, markers and/or pens

#### **Sketch Nature**

- Take your art supplies outside and find somewhere or something in nature to draw.
- It might be a leaf, a landscape, an insect, a flower or an atua
   Tāne-mahuta, Tāwhiri-mātea, Tangaroa.
- Try drawing your nature in many different ways – in detail, as shapes, with different colours.

#### **Nature Rock Art activity**

 Try copying your drawing (or something new) onto a rock using paint or markers.

#### **Classroom activity**

**Sketch nature**: Create a classroom collage of all your beautiful nature sketches.

Nature rock art: Take your rock home and gift it to your whānau or hide your rock in the school grounds for another student to find and enjoy. You could draw a 'treasure' map to help your classmates find it.





# Curious kea scavenger hunt



Take your treasure pouch and your scavenger hunt list.

- Write items on a small whiteboard and take outside with you, or
- · call out items from list below, or
- print separate scavenger hunt lists.

Now you're ready to head outside. Find the items as fast as you can!

- 5 different types of green
- 5 oddly shaped sticks
- 5 little things that roll
- 5 nature triangles
- 5 different smells (eg cut grass, wet bark)

#### **Teacher resources:**

- scavenger hunt list
- box or container for 'discover nature' chest

#### Students will need:

- scavenger hunt pouch/ container (or paper/card and tape to make your own by folding)
- scavenger hunt list available on the DOC education web page

#### **Classroom activity**

Make a classroom 'discover nature' treasure chest. Choose an item that captures your interest and add it to your chest. As a class, pick out one item at a time – can your class find the same one or where it came from?

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## Bookworm challenge

**READ IN NATURE** 



Each day, take your chosen book outside and find somewhere special where you'd like to read. This could be on your own, with your teacher or with a buddy.

Collect a stamp (or signature) from your teacher each day you complete the bookworm challenge.

#### **Teacher resources:**

- printable bookmarks
   (5 per page) available on the
   DOC education web page
- stamp/stickers



#### Students will need:

- reading book
- read in nature bookmark

#### **Classroom activity**

Share with your class what your special reading spot in nature looks, smells and sounds like.

How did it make you feel to read outside in your special place?





## Sensory sound map

LISTEN TO NATURE



#### Students will need:

- A4 piece of paper and something to press on like an exercise book
- plain or coloured pens/pencils

Head outside and spread out somewhere comfortable.

- Place an X in the center of an A4 piece of paper. This X represents you.
- Sit or lie quietly and listen to all the sounds you hear (try closing your eyes).
- Map these sounds on the paper

   what can you hear in front,
   behind, to the sides and even above you?
- Use words/drawings to represent and describe the sounds.

#### Classroom activity

Share your sound map and what you heard with your classmates.





# Nature journalist REPORT ON NATURE



#### Students will need:

Camera/iPad and/or artwork

#### **Activity**

- Story ideas / angle
  - What's the current event or news article you want to write? Is it:
    - an opinion piece (like an editorial)
    - a feature article (longer and more in-depth than a regular news article)
    - a report on a nature project
    - a story eg a day in the life of a tree/bird/insect
    - a fact sheet
- Interview questions (for people or nature itself get creative, what did the tree see, hear, feel?)
- Drafting your story you will need;
  - Opening paragraph (sometimes written in bold font)
    - Tell the reader the key details of the story (who, what, when, where)
  - Quotes from your interview(s) to help tell the story.
    - These are the exact words spoken by the person you interviewed. Remember to use speech marks.
  - Conclusion sum up the story and leave the reader with something to think about.

- A headline (and sub-heading) to attract the reader's attention and make them want to read the story.
  - Make it short and snappy. Funny. Dramatic.
- An image photo, illustration or artwork a picture tells a thousand words!
  - A caption for your image what's the image of?
- Publishing where will your readers find your article?
  - School/class newsletter? Website? Blog?

#### **Extension ideas**

- A class newspaper what would you call your class newspaper?
  - Collate your stories into one publication.
- Film your class news and create a 'bulletin'
  - Tell your different stories all at once





## Orienteering

#### **RACE IN NATURE**



#### **Activity**

Orienteering is a fun sport where fitness, map reading skills and clever thinking all plays a part in who can get around a course in the fastest time. Orienteering can be a fun way to explore your school grounds and move through nature, it can also be competitive with time being a motivation.

- Provide (or create) a map of your school grounds.
  Clearly identify the boundaries for this activity.
- **Provide a list of locations** for students to include as their orienteering controls, for others to find.
  - A native tree, an exotic tree, a nice place to sit in the sun, a quiet place, a noisy place, a place where the wind blows litter, a place where insects like to live, a tree that birds visit often etc
- Take a walk outside and encourage students to explore locations suitable to place an orienteering control/marker, for others to find. Keep your ideas secret!
  - Students mark on their map where to put their controls.
  - They could also write clues that can be used instead of controls.
- Teacher to select which maps (or take time to explore all the courses) to be set out.
  - Course(s) can be completed individually, in pairs or groups of three.
  - Set students off at intervals if you are wanting to use time as a motivation.
  - Stagger where students start on the course to avoid 'tail gating'.

#### Students will need:

- Map of school grounds (or create your own as a separate activity)
- Orienteering controls/markers (or create your own class set)

#### **Extension ideas**

Students create your own map of the school grounds and

- Add landmarks to your map to add interest and accuracy to your map.
  - Large trees, sheds, fences, playground, seats, gardens
  - Categorise common landmarks with a symbol and add a key to the map

#### Create your class set of orienteering controls

Traditional orienteering controls are a square flag with a diagonal of orange and white. For this activity they could be

- Fabric flags or cards, painted rocks or specific items to locate
- Make sure you number or code each control so students prove they have located the control

#### Measure your distances/times

- Estimate distance and use measuring tools to determine the distances between each control point
  - Who in the class had the longest course?
     Shortest course? Mean, median, mode etc.
  - What was the fastest times, average time etc.

#### Other resources

Short film - 10 elements of orienteering

https://www.orienteering.org.nz/resources/schools-resources/





## Get to know a tree Tūhono ki nga rākau



This activity acknowledges Tāne - Atua of the forest, trees and all that Tāne has to offer.

He rākau nō wai? he rākau nā Tāne. Tāne te wainui, Tāne te wairoa, Tāne te waiora. A tree from who? A tree from Tāne. Tāne of plenty, Tāne of maturity.

#### CONNECT TO TĀNE



- Find a tree to sit/stand beside.
- Close your eyes. What can you hear?
- Open your eyes, what can you see?
- Can you see leaves/seeds/bark/fruit?
- What lives in your tree, on or under your tree?



- How does your tree feel, smell, look, move?
- Move like a tree in the wind, in Autumn, in Spring, in the rain.

Note down your observations in pictures or words. Give your tree a name that reflects what you have noticed about it.

- 1 'Poet tree' Trees are a good place for creativity and inspiration. Sit/stand/lie under your chosen tree and write a whakataukī or poem while you are there.
- 2 Use a frame or magnifying glass to focus on particular parts of your chosen tree that interest you (e.g. the bark, plants growing on the tree, leaves, light shining through the tree, the shadows it makes on the ground).







## Getting to know your tree better

- Observe your chosen tree(s) at different times of day.
- Would you notice different things at different times of day, over weeks, months?
- Revisit your chosen tree regularly and see if there are any changes (e.g. leaves changing colour, leaves falling).

#### The Arts

- Create tree shadow art on a sunny day, lay out a long piece of paper next to a tree and outline the shadow.
- Create leaf and bark rubbings.



#### English

- If your chosen tree(s) could talk, what would it say? Consider what the tree would see, hear, feel.
- Could it tell you anything about the history of your school? If this tree were your ancestor, what would they to say to you?
- · Write a story about a day in the life of your tree.
- Read Whakarongo ki ō Tūpuna/Listen to your Ancestors for inspiration.
- Create a factsheet about your tree(s). Factsheets in the DOC Experiencing native trees resource provide examples.

## Health and Physical Education

- With a buddy use your body to create a tree shadow. Your buddy can trace your shape on concrete.
- Which trees are safe for climbing? Practice safe climbing with help from your teacher. Learn about Tree Climbing Extraordinaires.
- · Flow through a tree pose.
- Play the meet your needs game (in the DOC Experiencing native trees resource, page 20-21).

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#### Mathematics and Statistics - Geometry and Measurement

- Measure the circumference of your chosen tree(s).
- Estimate the height of your chosen tree(s). What unit of measure is best to use?

#### Social Science

• Explore your own values about trees. Is there a tree that is special to you? Why? Reflect on your personal experiences with trees (e.g. tree climbing, going on picnics, playing in leaves, fruit picking).

### Technology



- Consider what digital technology could be used to help observe your chosen tree(s).
- · Make your own paper and write your poems on it.
- · Register at inaturalist.nz to identify unknown nature.

#### Science - Living World

- Sketch and label parts of your chosen tree(s).
- Create a class list of your chosen trees. Categorise them into native, endemic and introduced species.
- Consider what your chosen tree(s) would look like and what their role would be in different seasons.
- Create food chains or webs for your chosen tree(s).















## Outdoor learning kit Hangaia he kete tūhono taiao



Connect to nature, let ourselves be still, let ourselves feel alive'

'Tūhono ki te taiao, e tau ai te mauri, e ora ai te mauri'

These tools support any of the learning in nature activity cards. Create these tools with your students to help you teach outside and your students to learn in nature.

#### FRAMING NATURE



Nature frames help focus our attention.
They are a simple way of shifting the way we see things.



- 1 Create a class set of frames using -
  - Recycled card, boxes, scrap paper.
  - Wool or string.
  - Materials from nature (e.g. harakeke and sticks).



- Old picture frames (and decorate them).
- Your hands to make a 'finger frame'.
- 2 Take your frames outside and frame nature.
  - You could make a 1mx1m frame on the ground out of string and do this activity as a group, or a 5mx5m frame and get the whole class involved.
- 3 Frames can also be used to frame drawings or photos of your findings and experiences for the class walls or gifts for whānau.







#### TREASURE CONTAINERS



Collect treasures you find while out exploring in nature.

#### Create Treasure container

- Reuse old shoe boxes, paper bags, containers. You can decorate them with drawings or pressed leaves and PVA.
- Make a paper funnel/cone.
- Make a paper origami box.
- Work with experts to sew or weave a bag or kete/basket.

#### MAKE A NATURE JOURNAL



A class set of nature journals provides a great tool to record your discoveries, or tune in, focus and be mindful.

#### Materials needed



• Cardboard (e.g. recycle a box from the supermarket) cut into a size slightly bigger than A4.



- Selection of A4 paper try out different colours or re-use/recycle paper from the school printer.
- Elastic band, string or ribbon to hold it together. Or needle and thread to sew the spine.
- Envelope (A5 or smaller) or make one from an A4 sheet.
- Glue or stapler.
- Pens, pencils, crayons.

#### Make your journal

- 1 Fold the cardboard and A4 pages in half to make a book.
- 2 Secure with a rubber band or string or sew it.
- 3 Staple or glue the envelope inside the back cover a handy pocket for pencils or treasure.
- 4 Personalise or decorate.















## Mapping near, there and far Konei, konā, kora



Ranginui stands above, Papatuānuku lays below. The winds of <u>Tawhi</u>rimātea blows around us. Tis it is done, it is complete

Ko Ranginui e tū iho nei, Ko Papatuānuku e takoto nei. Ko ngā hau ora o Tāwhirimātea e pupuhi nei. Haumie Hui e ... Taiki e

Explore outside with your senses and map your nature
When taking time to look around us, we acknowledge the sky father, the earth mother.
We take time to acknowledge the breeze and winds of Tāwhirimātea.

#### **GET ACTIVE AND MAP OUTSIDE**



- Draw a spot in the middle of a page. This represents where you are.
- Draw three concentric circles around the dot and mark them with near, there and far.



• Choose a sense to focus on – hearing, smelling, seeing, or all three.

#### Head outside and find a comfy place to sit or stand quietly



- Practice a body scan to help tamariki centre themselves to the land.
- Focusing on their chosen sense(s), ask tamariki to notice what is 'near'.
- Repeat for 'there' and 'far'.
- Record what you see/hear/smell in words or drawings in the first circle.
- Count the steps to your 'there' spot and run back again.







#### The Arts

- What sounds did you hear outside? Use instruments and/or natural objects to recreate the sounds you heard.
- · Compose your own musical piece and/or write a waiata/song to describe your outdoor space.
- Perform your song for your class, whanau or friends.

#### Health and Physical Education

- · Get active with a game like go home, stay home, in your mapping area.
- Map your wellbeing https:// sparklers.org.nz/activities/ how-am-i-doing/
- · How many skips, jumps or hops to your 'there' space?
- · Run to your 'far' place in the school grounds. How long does it take to run there are back?







### English

- · Make lists of the nature you can see, touch, hear and smell.
- If you were to give an animal or plant you saw a name, what would it be, and why?
- Create similes and metaphors to describe your outdoor space (e.g. a flower as yellow as the sun).
- Create a sensory poem to describe your outdoor space.
- Create a listening poem about what you hear in your outdoor space.
- Write a poem or story about an animal or plant you saw. What do you admire about it?

#### Mathematics and Statistics

Measure/estimate the distance to your 'there' and 'far' places. What unit of measure is best to use?

Draw a map of your 'near', 'there' and 'far' environment and show the position of your listed items.

- · Create a sound map as a class.
- · Use a coordinate system.
- Write directions to the location of your 'far' place from your classroom. Test your directions with a buddy.

Carry out a statistical investigation with your classmates.

- How many people noticed the same things?
- · What senses were used most? What senses would your classmates like to use more?
- · What sounds were the most familiar? What sound did you like best? Why?















## Nature treasures He taonga taiao



Acknowledgment to those, I lead with presence, my presence lives, my presences is calm.

E ngā ihi, e ngā wehi tēnei ka tākina ake te mauri, e ora ai te mauri, e tau ai te mauri. Whano, whano tū mai te mauri, haumie, hui taiki e.

This karakia acknowledges the atua that have provided these taonga for us to take and create treasures for ourselves and others.

#### GATHER NATURE TREASURES TO CREATE, SHARE AND GIVE



- 1 Go outside and gather a range of nature treasures leaves, stones, sticks, nuts, seeds and flowers.
  - Take a container to collect treasures in.



• You could also carry a rubbish bag to collect any litter you find along the way.



 Maybe try collecting based on a theme (e.g. autumn), number (e.g. only 10 items), size (e.g. only tiny or only long items), weight (only heavy or only light items), texture etc.

#### 2 Make your creation

- Create a picture, sculpture, mandala, or a treasure selection.
- Depending on what it is, you could gift your creation to someone special, or display it in class.







#### The Arts

- Create art with treasures you have found.
- Create musical instruments using your treasures and make music.

#### Mathematics -Geometry and measurement

- Sort your treasures by size, colour, shape, texture, weight.
- Measure the smallest and largest, lightest and heaviest treasures. What units of measure are best to use?







## Health and Physical Education

- Go on a hikoi and explore your local community for different nature treasures.
- Working with some friends, use your bodies to replicate one of your nature treasures.
- Can you organise your bodies to look like a leaf or flower?

#### **English**

- Which one word best describes each of your treasures. Collate all of your nature words into a class word bank.
- Write descriptive sentences and/or stories to describe the treasures and where you found them. Use your senses to describe how they feel, smell and sound.
- · Write similes and metaphors to describe your treasures.
- Create signs to display alongside your treasures. Include common, Māori and Scientific names for your treasures.

#### Science - Living World

Examine your classmate's treasures.

- What can the treasures tell you about the biodiversity (variety of life) in your school grounds?
- How many different leaves/insects/birds/plants/trees have you found?
- Discuss what you know about your school grounds from the collection of objects (e.g. Which plants are native/food/Rongoā/introduced? What animals/birds/insects live in or use these plants? Which trees are deciduous or evergreen?).

Sketch and label pictures of your treasures.

- Categorise your treasures according to characteristics (e.g. natural or man-made; living and non-living). This could lead onto class discussions about what things are made from, what comes from nature, natural resources.
- Watch The Big Picture with Ruud Kleinpaste video to prompt these discussions and further research.















# Re-framing nature Taitapa anotia te taiao



This activity encourages tamarki to take time to feel peaceful in their surroundings.

Hohou ai ki runga, hohou ai ki raro, hohou te rongo. Peacefulness above, peacefulness below, I feel at peace.



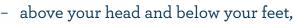
#### TAKE TIME TO NOTICE NATURE

Fly like a bird, creep like an insect and take a different view of the world. How does it feel to be a leaf floating to the ground? What is it like to be a tiny insect in a big world? What do you see, feel, hear when you look up at the sky?



Go outside and explore. Use a frame to focus on nature.

See through new eyes by looking:





- from up above and low down,
- inside bushes and under leaves,
- under rocks and inside crevices.



- Capture your view in drawings, words, photos, poetry, writing so you can use and share it later.
- Find a new view or get close up to things that interest you.
- Lay your frame on the ground somewhere grassy how many different plants can you see? Do you know what they are?
   Are there any creatures living in your grass forest?







#### The Arts

- · Create a collage.
- Print a photo on cardstock and cut it to make a photo puzzle.
- Create artwork inspired by what you found outside. Use the colours, textures, light and shadows in your nature photographs as inspiration.
- What can you see in your frame? What colours would you use to paint or draw what you see?

#### Mathematics -Geometry and Measurement

- Experiment with cropping and resizing your photos before printing them. What size do they need to be to fit in your story or class display?
- Look for symmetry in your drawings/photos (e.g. a butterfly is a good example of reflective symmetry).

#### Social Science

 Consider how your school grounds have changed over time. Research to find images of your school from previous weeks, months, years.

#### Digital technology

• Create a pixel drawing of one of your photographs.

#### **English**

- Use what you observed to plan and tell a story, for example; a report, personal recount, play, poem, comic strip, etc.
- Write a 'day in the life of...' story from the point of view of a plant or creature you found in the school grounds. Consider what they would see, hear, feel.
- Read the Life of Py blog story to spark ideas for your own story.

## Health and Physical Education

- Reflect on how this activity made you feel. Record your thoughts in a nature journal.
- Choose an animal or bird you can see. How do they move?
   Can you move like that?
- With a group of friends create a dance or mime that uses these movements.
- Try a Sparklers take notice activity https://sparklers. org.nz/activities/favouritesnatural-world/







#### Science - Living World

- Create signs to describe your drawings/photos. Include common, Māori and Scientific names of plants and animals.
- Reflect and make sense of your observations. Think, pair and share.
- What do you think about your observations? What can they tell us about the school grounds?
- Examine your classmate's drawings/photos. Discuss what you could
  predict about your nature space from the photos taken (e.g. Which
  plants are native/food/Rongoā/introduced? What animals/birds/
  insects live in or use these plants? Which trees are deciduous or
  evergreen?).
- Consider what you would see in your school grounds at different times of day, weeks, months and seasons. Repeat this activity at a different time to see how may differences you can observe.















## Nature sensory bingo Kēmu wharewhare taiao



Through learning we know, by knowing we understand, by understanding we are confident.

Mā te ako ka mōhio, mā te mōhio kā mārama, mā te mārama ka mātatau.

#### KEEP LEARNING IN NATURE



#### Colour and shape bingo

- Create a simple bingo sheet with different colours or shapes.
   Leave some blank spaces for discoveries.
- Take your bingo sheets outside and record what colours / shapes you find.
- Can you find anything surprising? Different? Unusual? Repeated?

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#### Cloud bingo

- Create a simple bingo sheet with various shapes or objects.
- Lie down and observe the sky.
- Use your imagination to find shapes/objects / creatures in the clouds.

#### Plant sensory bingo

- Download and print the plant sensory bingo, or create your own.
- Take bingo sheets outside and in groups, pairs or individually, explore and record what you find. Encourage tamariki to collect individual leaves, flowers or seeds if appropriate to do so.
- Use your senses what do the plants and leaves look, smell and feel like?
   Avoid tasting.

An A4 printable version of this plant bingo sheet can be found here: www.doc.govt.nz/education-nativetrees (pg 28).







#### The Arts

- Create artwork to depict the nature you saw, touched, heard and smelt.
- · Create leaf rubbings.
- Use photos of the items found during your nature bingo activities to create a collage of the shapes and/or colours found in your outdoor space.
- Use the items found during your nature bingo activities as inspiration to draw nature patterns and shapes.

#### English

- Use the items found during the colour bingo activity as prompts to create a colour poem.
- What one word best describes an item you found? (choose your most interesting five items).
- Find synonyms to describe the things you found in different ways.
- · Collate your nature words and create a class nature word bank.



#### Health and Physical Education

- Investigate the role of plants for our body's health as a source of nutrition and fuel, as well as medicinal/rongoā qualities.
- Make this activity into an amazing race/scavenger hunt. Who found the most / unique / biggest / smallest items?

#### Science - Living World

- Look at the Te Reo Taio booklet https://www.doc.govt.nz/getinvolved/conservation-education/resources/kia-kaha-te-reo-taiaoposters-and-booklet/
- Categorise your treasures according to characteristics (e.g. living and non-living).
- Examine your classmate's items. Discuss what you could predict about your outdoor space from the collection of objects (e.g. are there many native plants? What animals/birds/insects might live in and around these objects? How would they use them or benefit from them?)

#### Mathematics and Statistics - Geometry and Measurement

- Draw and describe attributes of the shapes you found in your outdoor space (e.g. sides, corners, curved and straight lines, edges, pointed).
  - Do you see any ways that these shapes that are alike?
     How are they alike?
  - Can you see any shapes that are different? How are they different?
  - What do these shapes have in common?
  - Are all the sides the same?Are all the corners the same?
- Using the items collected, investigate examples of patterns and symmetry in nature (e.g. a daisy flower is a good example of rotational symmetry).
- Use photos of the items found during your bingo activities and mirrors to investigate reflection symmetry.
- Sort items collected by size, colour, shape, texture, weight.













