



EARTHQUAKES AND TSUNAMIS

PRE-ELEMENTARY SCHOOL TEXTBOOK

**SERVICIO HIDROGRAFICO Y OCEANOGRAFICO DE LA ARMADA DE CHILE
INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
INTERNATIONAL TSUNAMI INFORMATION CENTER**

EARTHQUAKES AND TSUNAMI

PRE-ELEMENTARY SCHOOL TEXTBOOK

ABOUT THE TEXTBOOK

This book is the result of both the implementation of Recommendation ITSU-XIII.3 of the Thirteenth Session of the International Co-ordination Group for the Tsunami Warning System in the Pacific, and the work of several education experts. An ad-hoc Working Group headed by H. Gorziglia (Chile), revised the work done by the experts who were partially funded by the Intergovernmental Oceanographic Commission.

PREPARED BY

*Yolanda Cañete Martínez *, Liliana Delgadillo Vera *
Blanca Ledesma Levill *, Gilda Medel Salvador **

SUPERVISED BY

*Rosenda Espinoza **

ADAPTED BY

*Yarimy Arcos González ** Basic Teacher
Margot Recabarren Herrera **, Education Expert*

EDITORIAL ASSISTANCE

*Leopoldo Toro Videla ***, Designer*

REVIEWERS

*Emilio Lorca Mella ***, Gelogist
Hugo Gorzigila Antolini ***, Director
Elvira Arriagada Hidalgo *, Risk Prevention Expert*

() Secretaría Ministerial de Educación, Va. Región, Chile*

*(**) Dirección de Educación de la Armada, Chile*

*(***) Servicio Hidrográfico y Oceanográfico de la Armada, Chile*

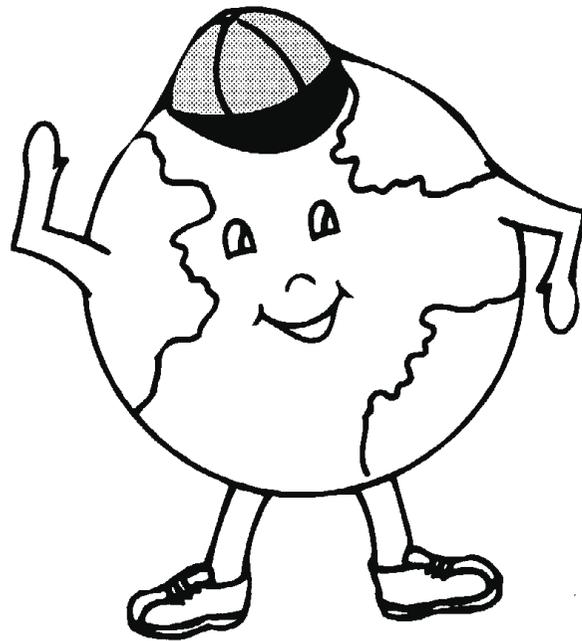


CHAPTER I

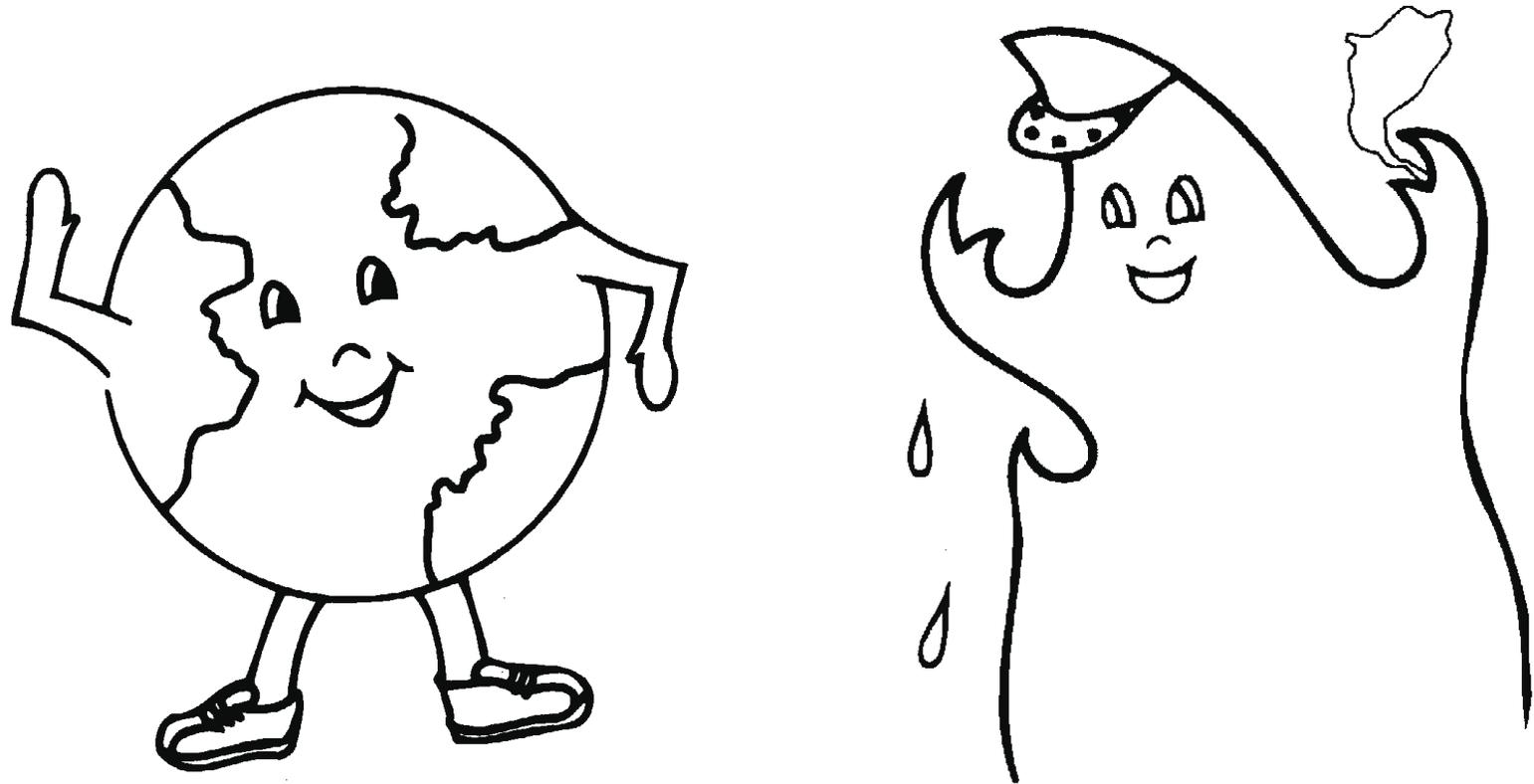
SHAPES AND MOVEMENTS OF THE WATER



iHELLO! HERE WE ARE...



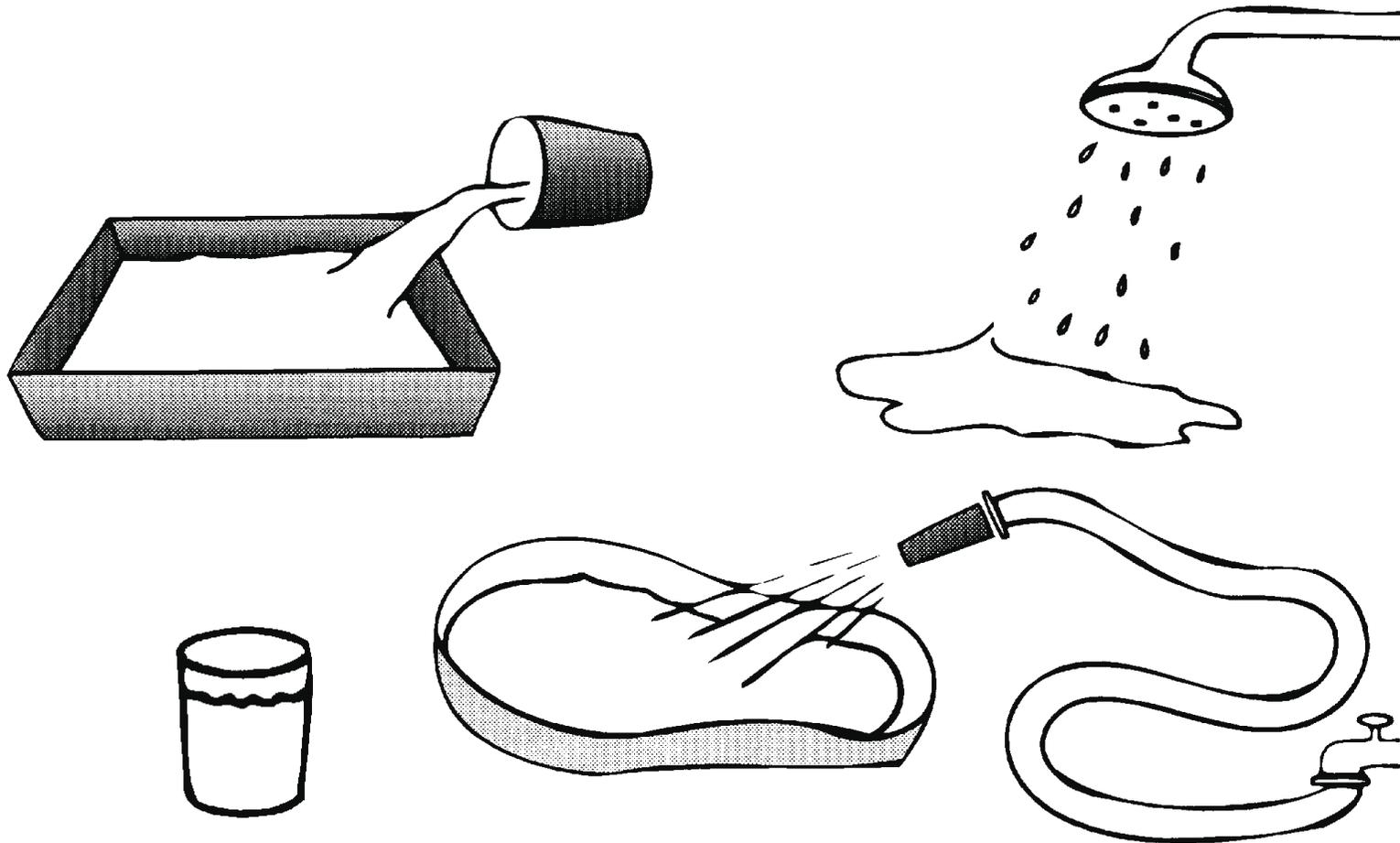
Johnny Shaking and Tommy Tsumi



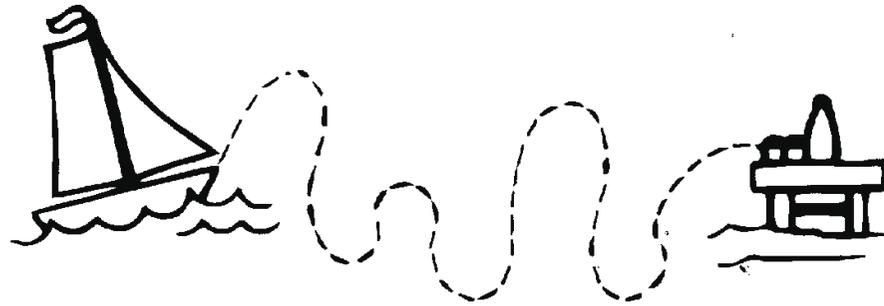
Dress with the national costume and color.

SHAPES AND MOVEMENTS OF THE WATER

– Color the water

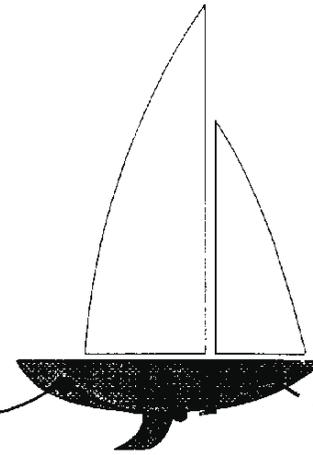


MOVEMENTS OF THE WATER

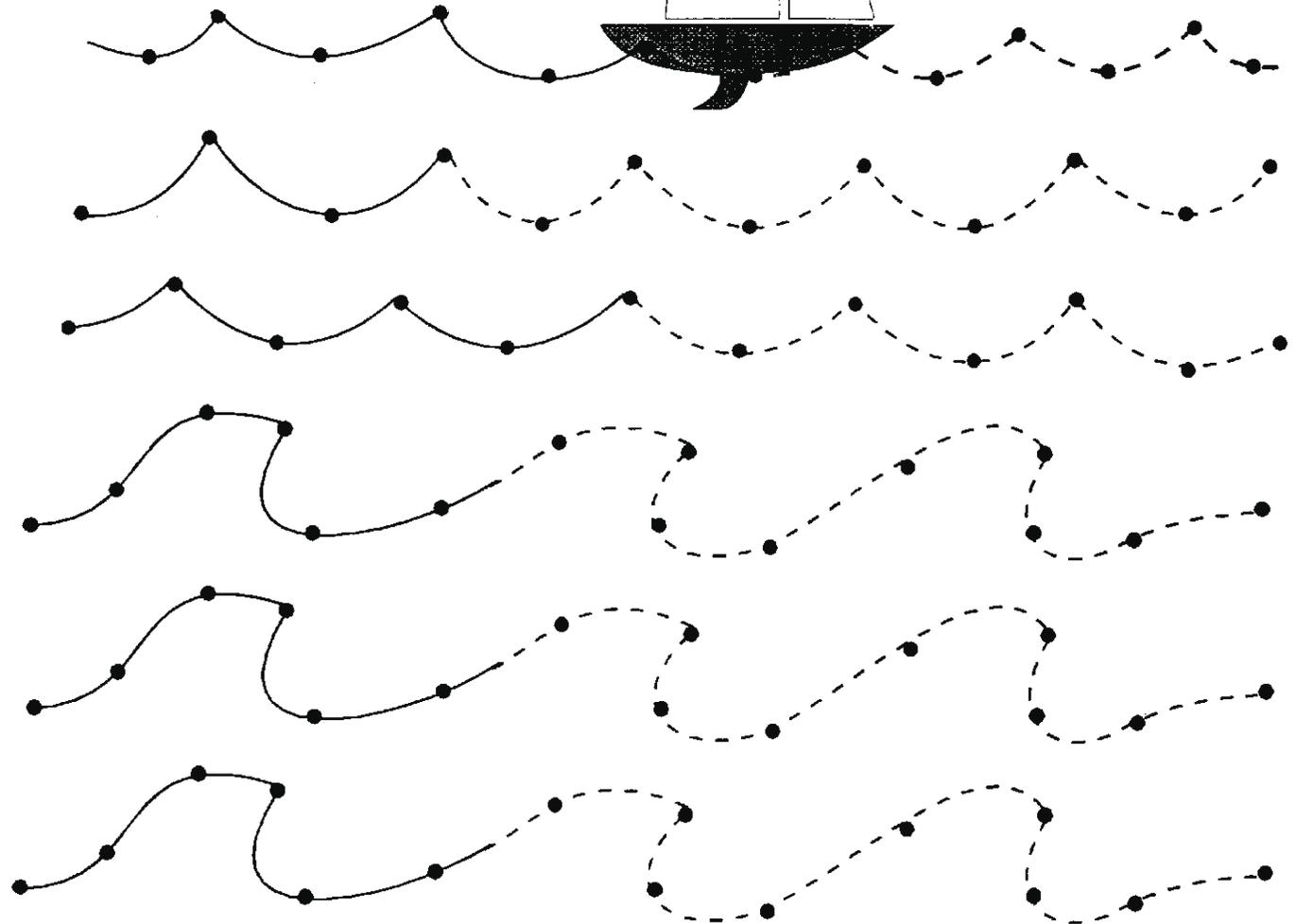
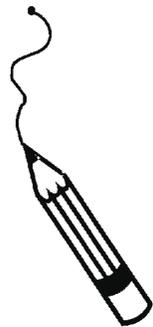


Join
the traces
of waves.

MOVEMENTS OF THE WATER

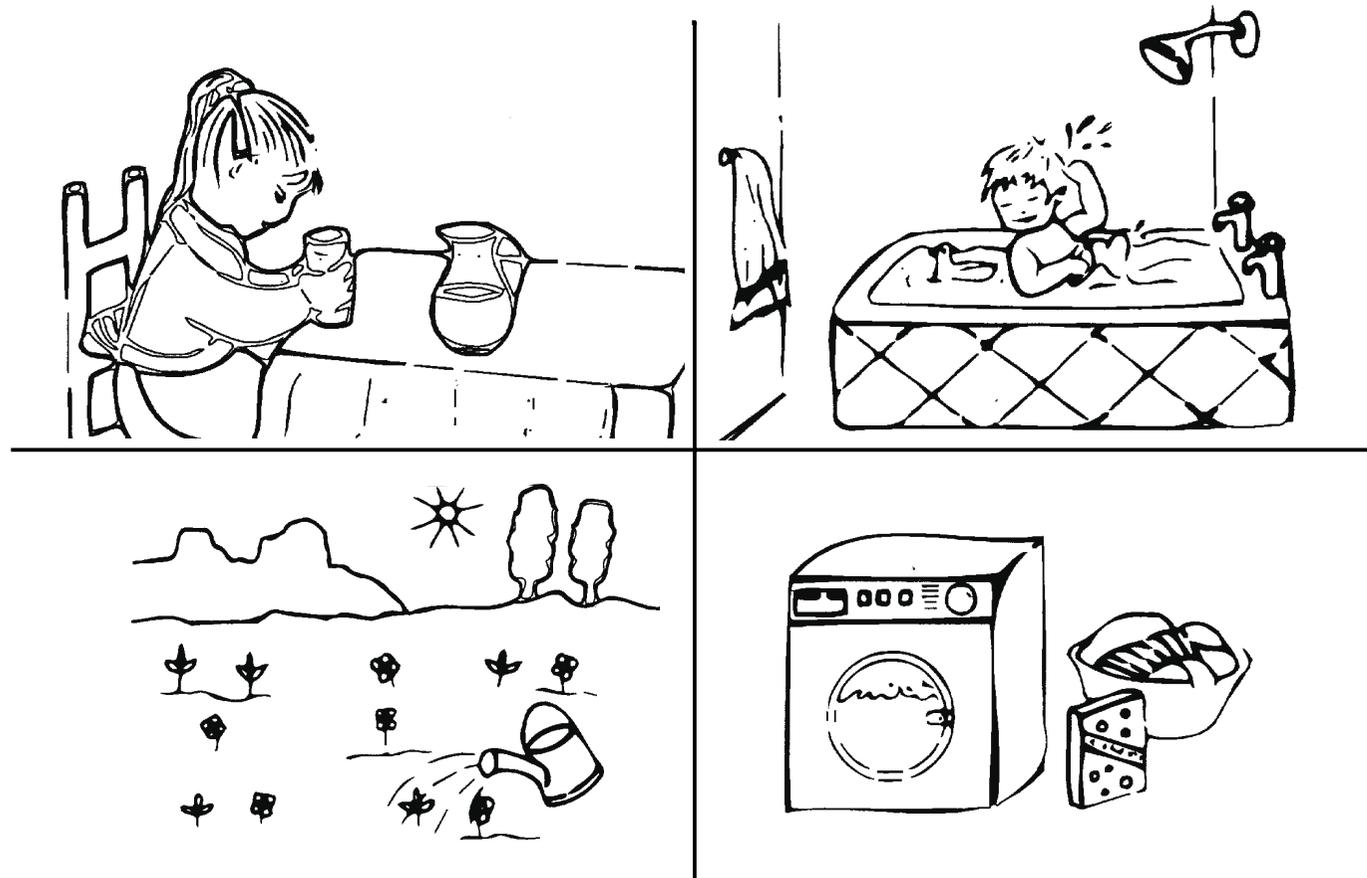


Join
the dots
to show
the waves.



USEFULNESS OF WATER

- Describe the drawings
- Tell experiences
- Color





CHAPTER II

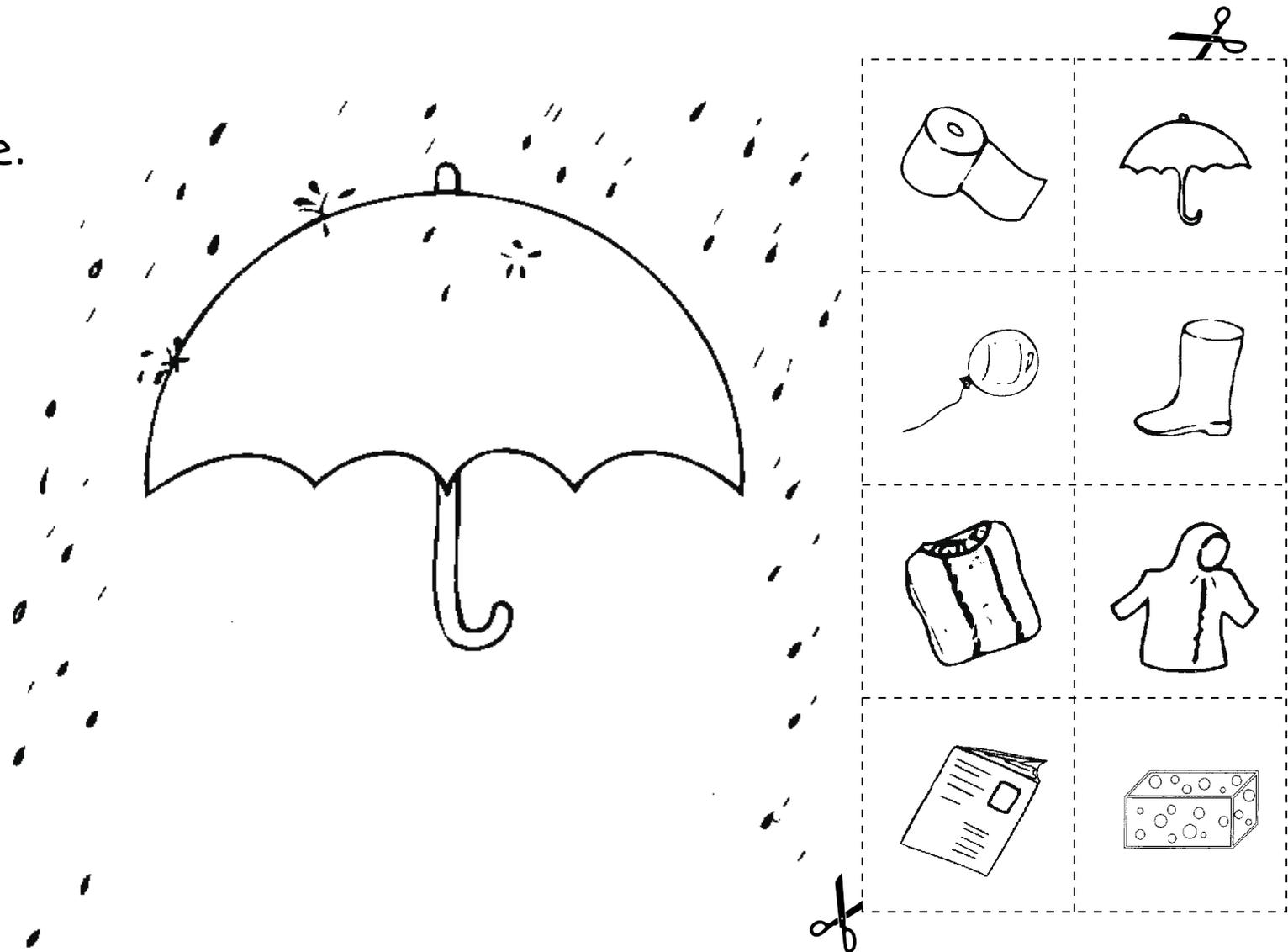
PERMEABILITY AND BUOYANCY



- Cut out the pictures at the bottom of the page.

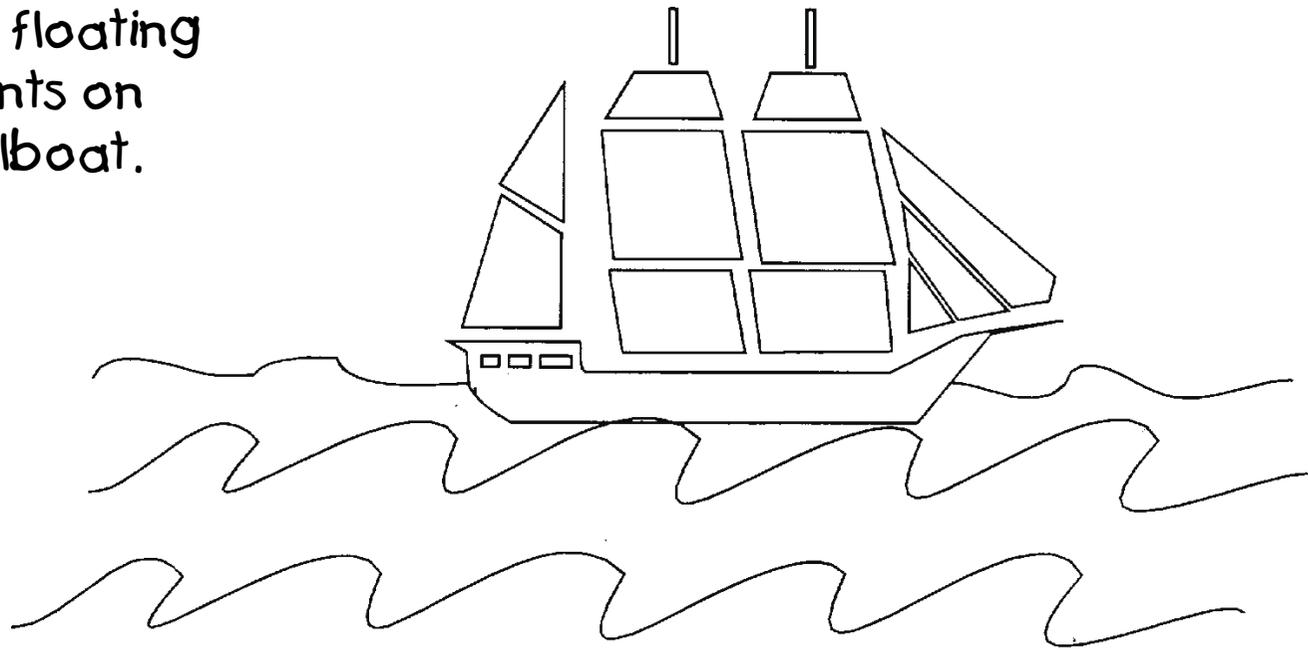
- Stick permeable elements under umbrella.

- Stick waterproff elements on the umbrella.

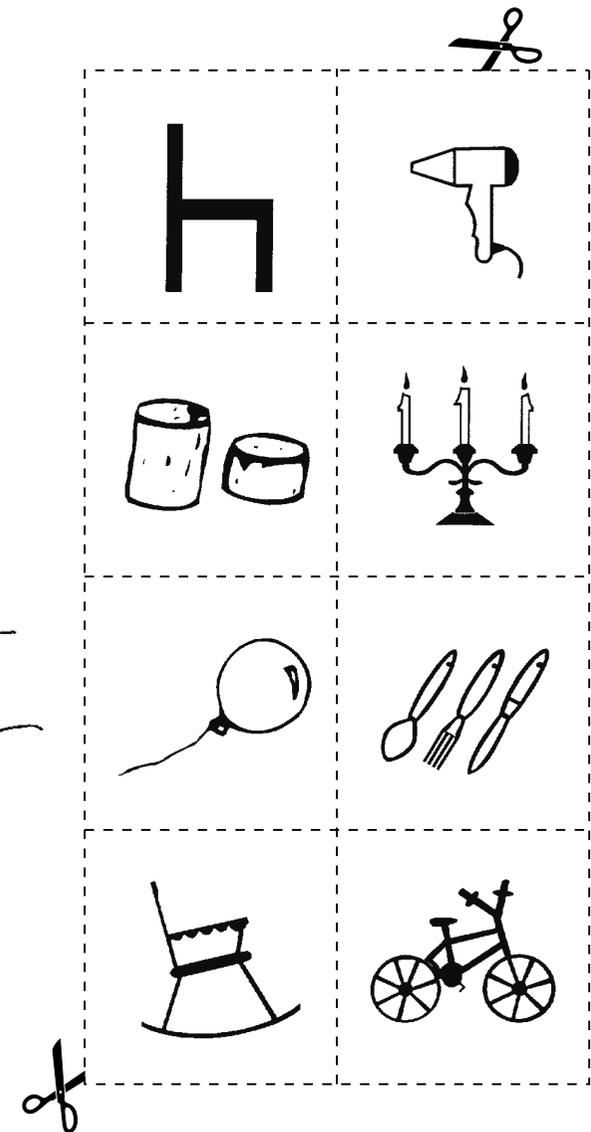


- Cut out the pictures at the right of the page.

- Stick floating elements on the sailboat.



- Stick non-floating elements under sailboat.



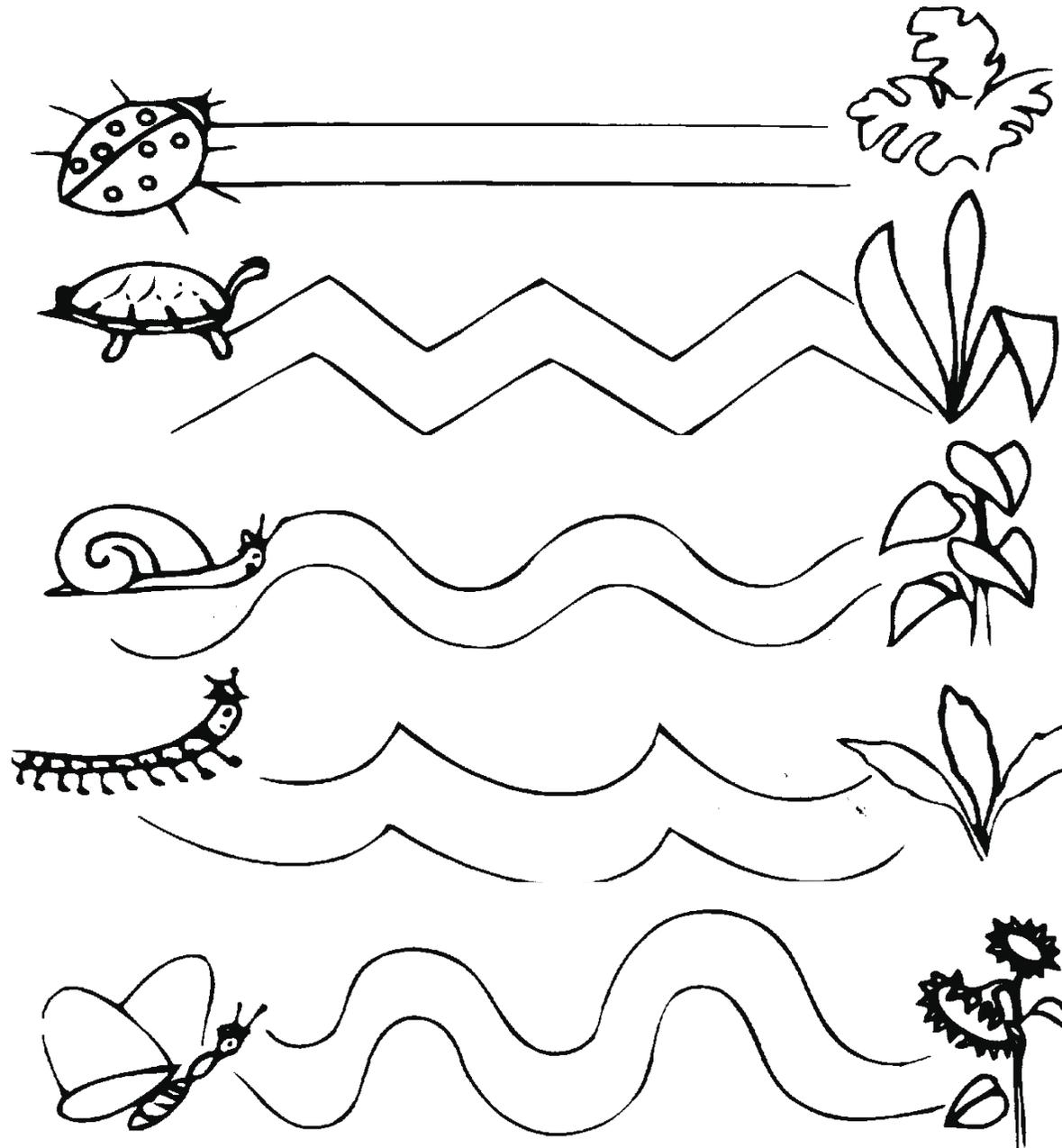


CHAPTER III

LIFE STYLES AT DIFFERENT SETTINGS

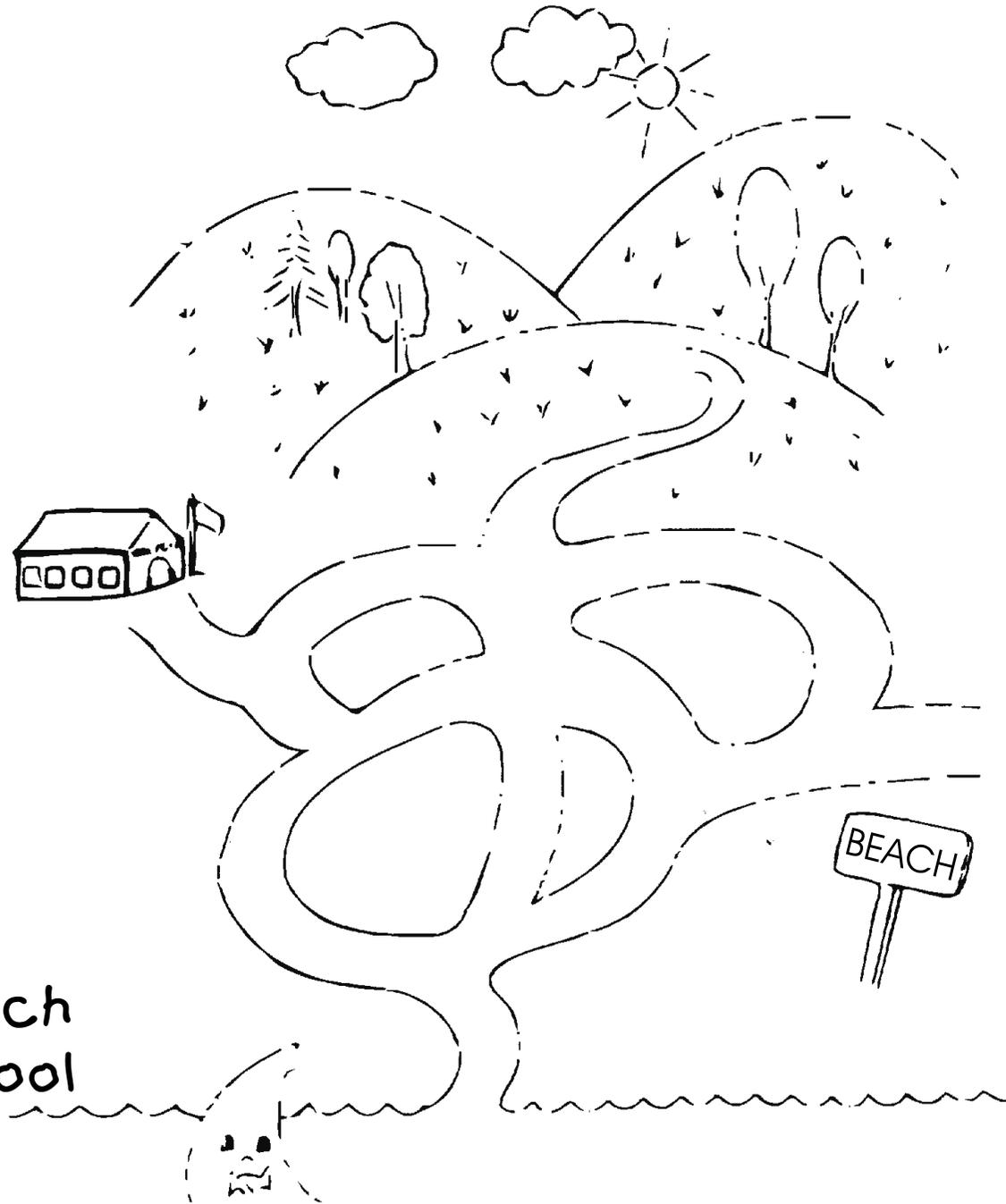


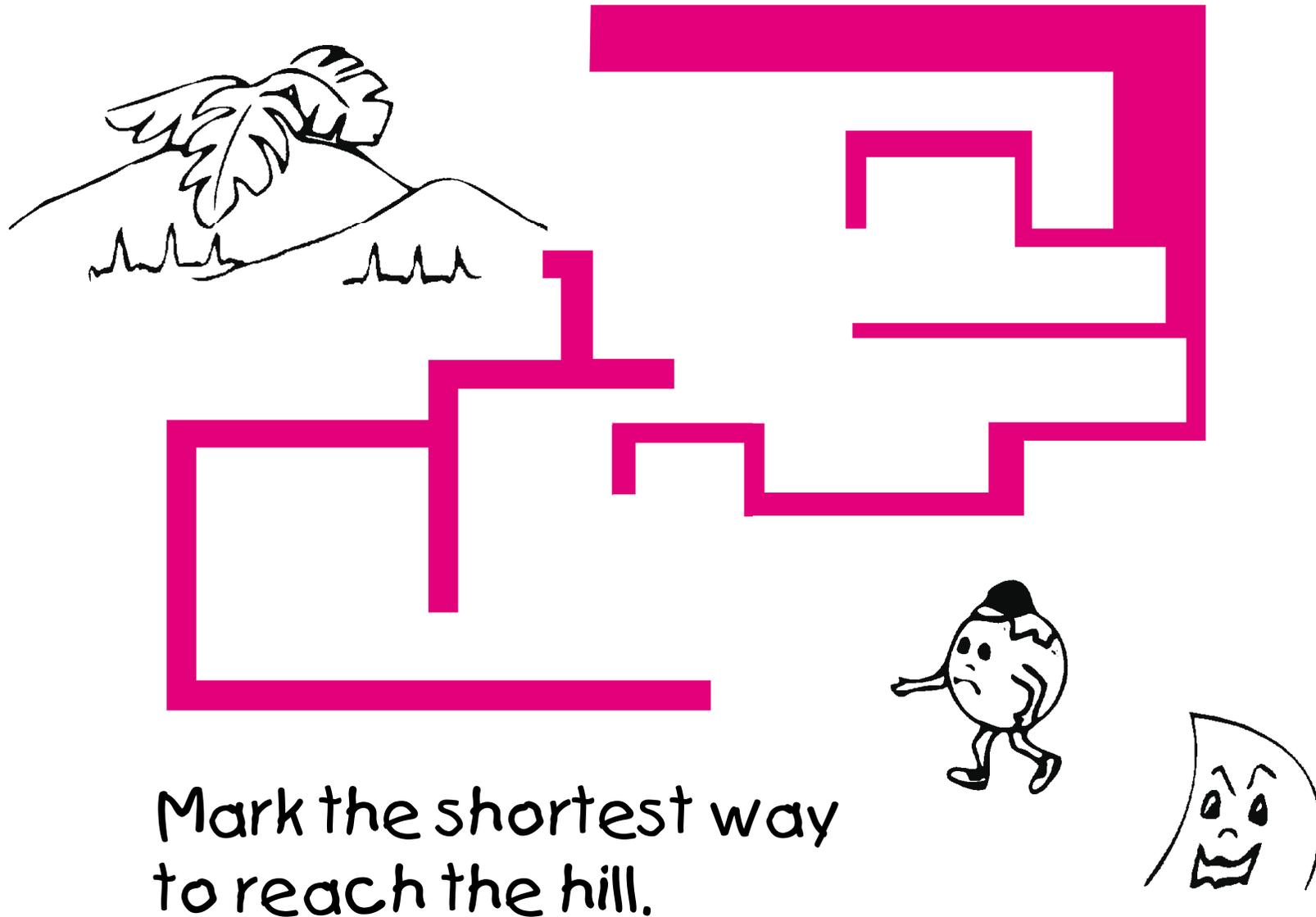
- Mark the way of each animal to reach home.



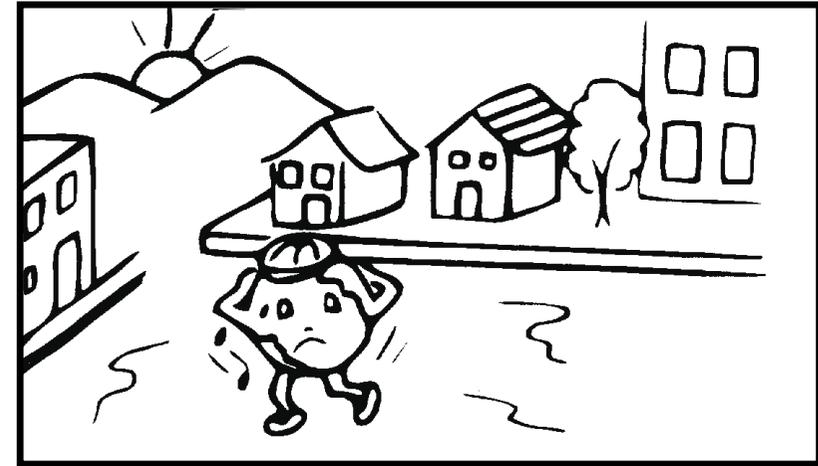
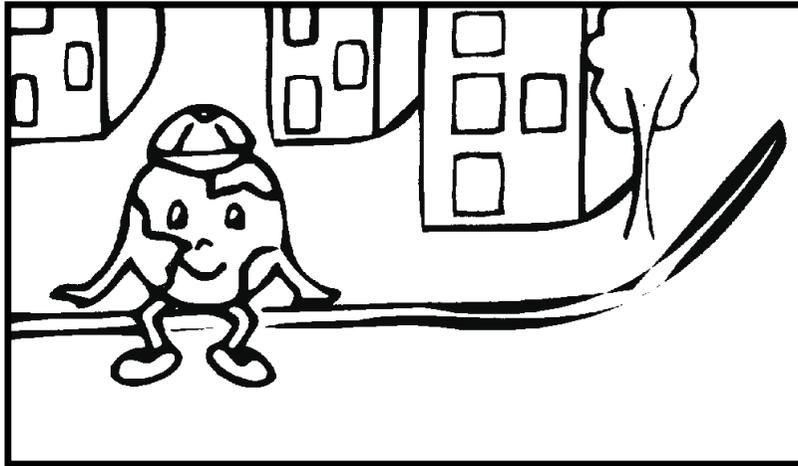
- Look for
the shortest
way to the hill.

... if you are at the beach
... if you are at the school





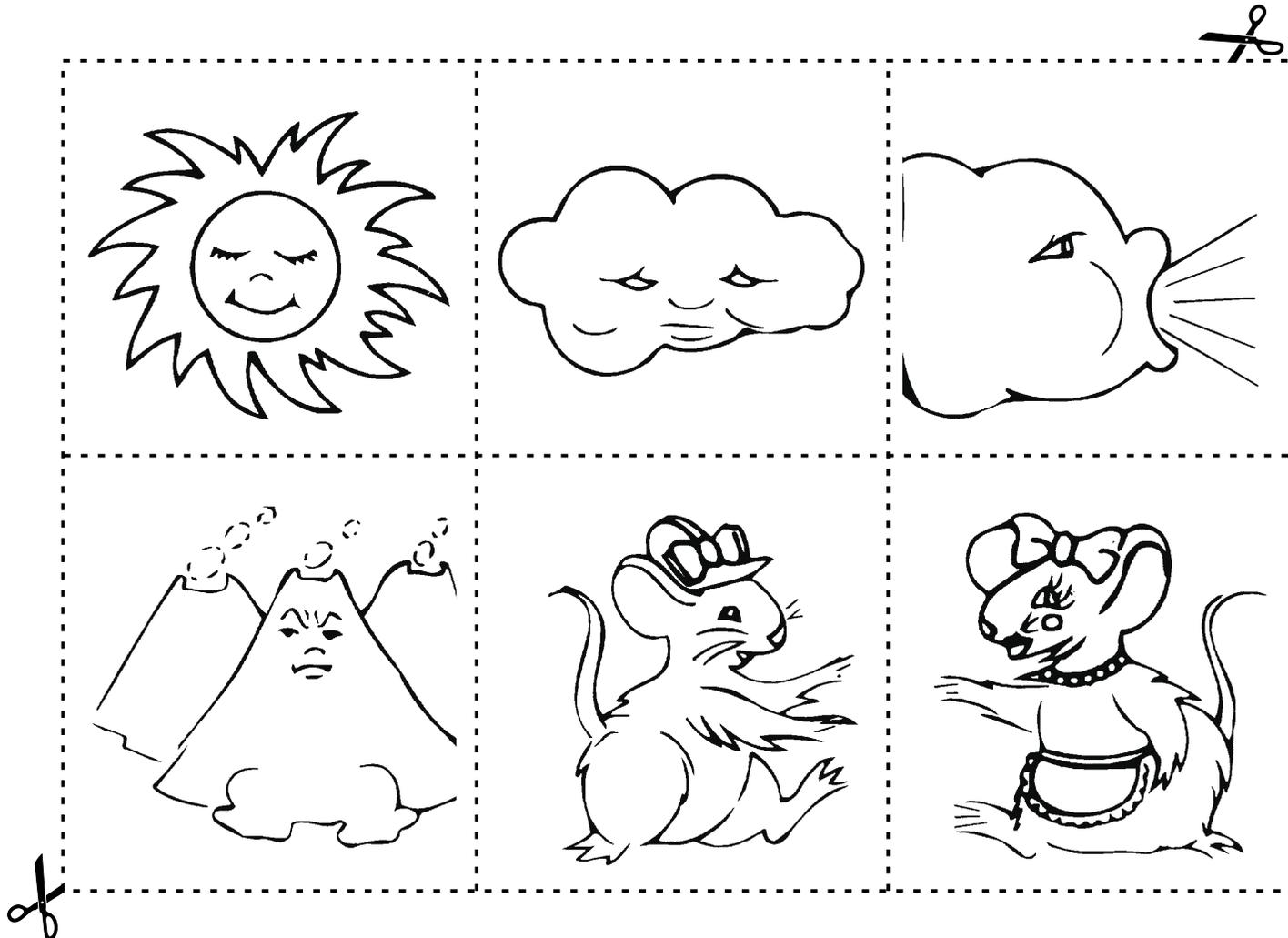
- Invent a tale about Johnny Shaking.
- Put the drawings in order.



METEOROLOGICAL PHENOMENA

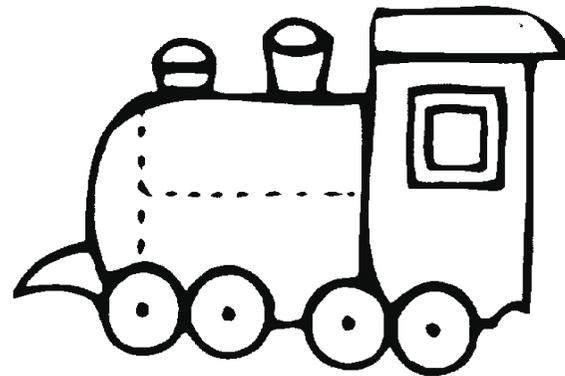
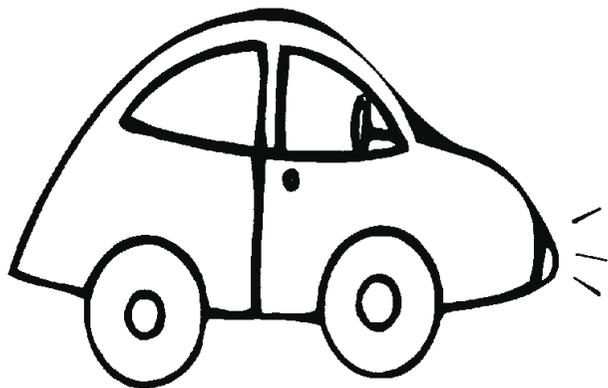
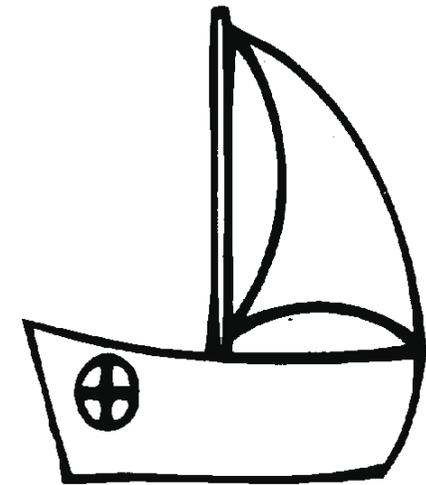
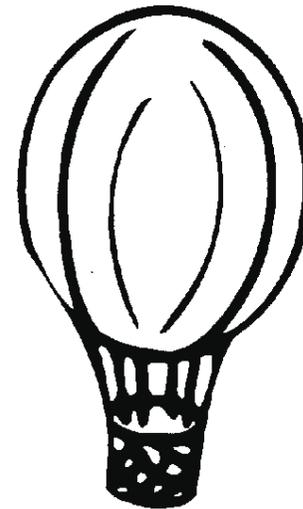
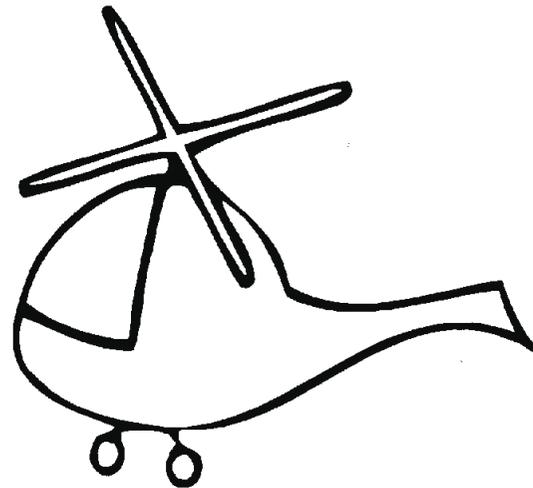
TALE: "THE VAIN MOUSE".

- Cut out and order the drawings in a logical sequence.



UNFINISHED TALES

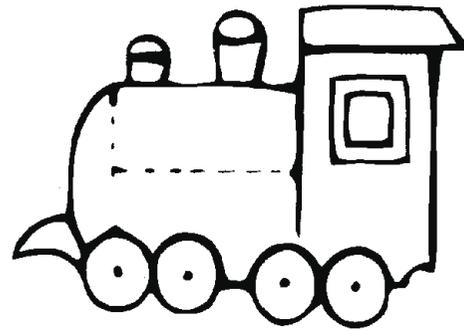
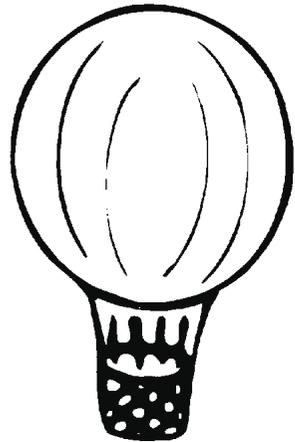
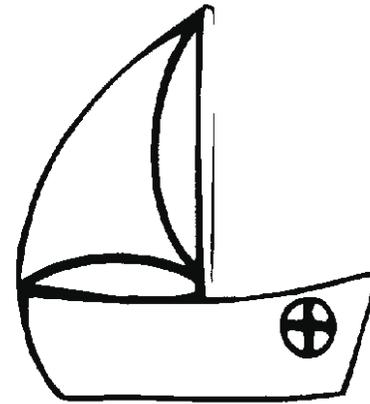
When traveling
by sea
swimming fishes
are seen
if I go sailing
what shall
I take...?



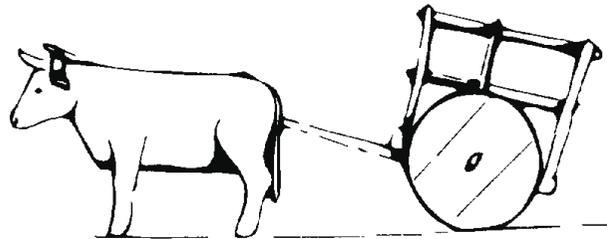
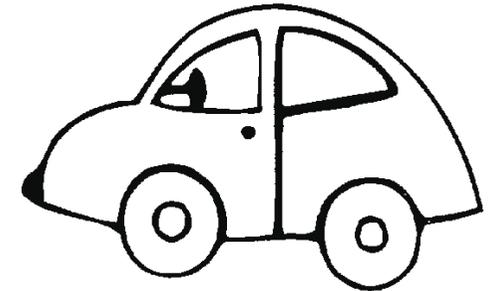
When I travel
through the sea
by ship, sailboat
or motorboard
I can navigate.
With the
merry-go-round
of the waves
I move endlessly.

How good is to enjoy
a nice walk in the country
riding a horse,
but I could be late.
What shall I take
to arrive sooner...?

By car I can reach everywhere.



If I take a...
I could be late,
I can use a bike,
a skateboard
or simply walk,

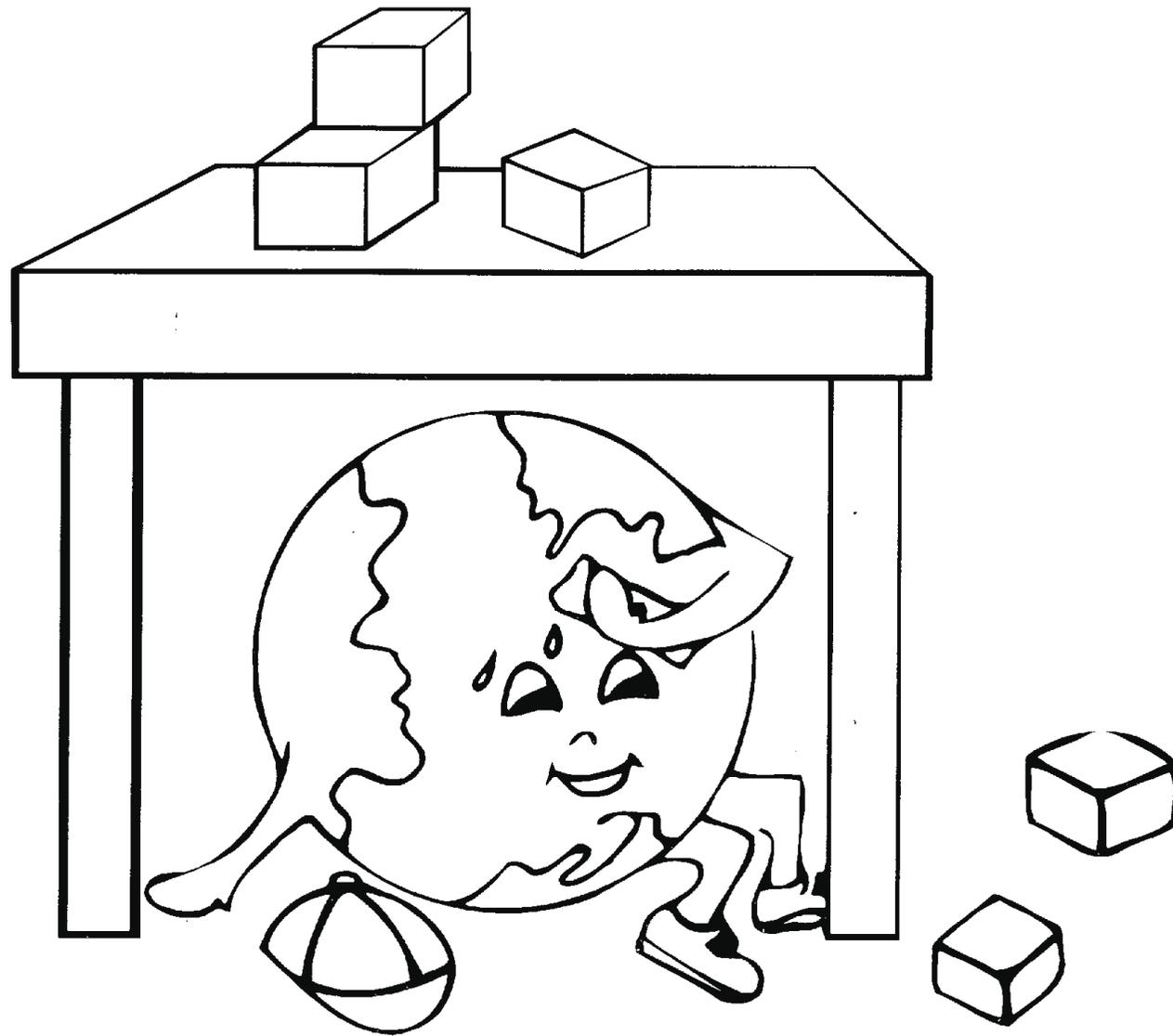


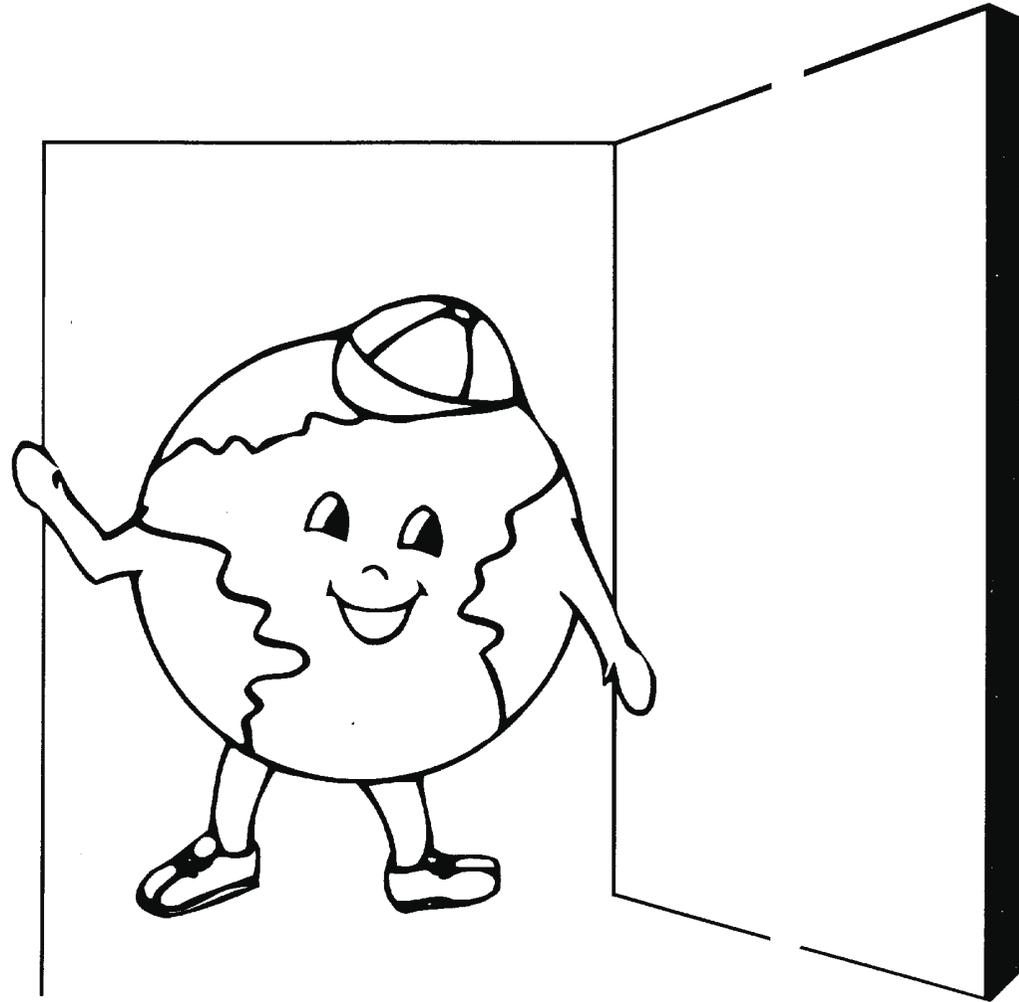
and up to the top of the hill,
in time I will arrive.

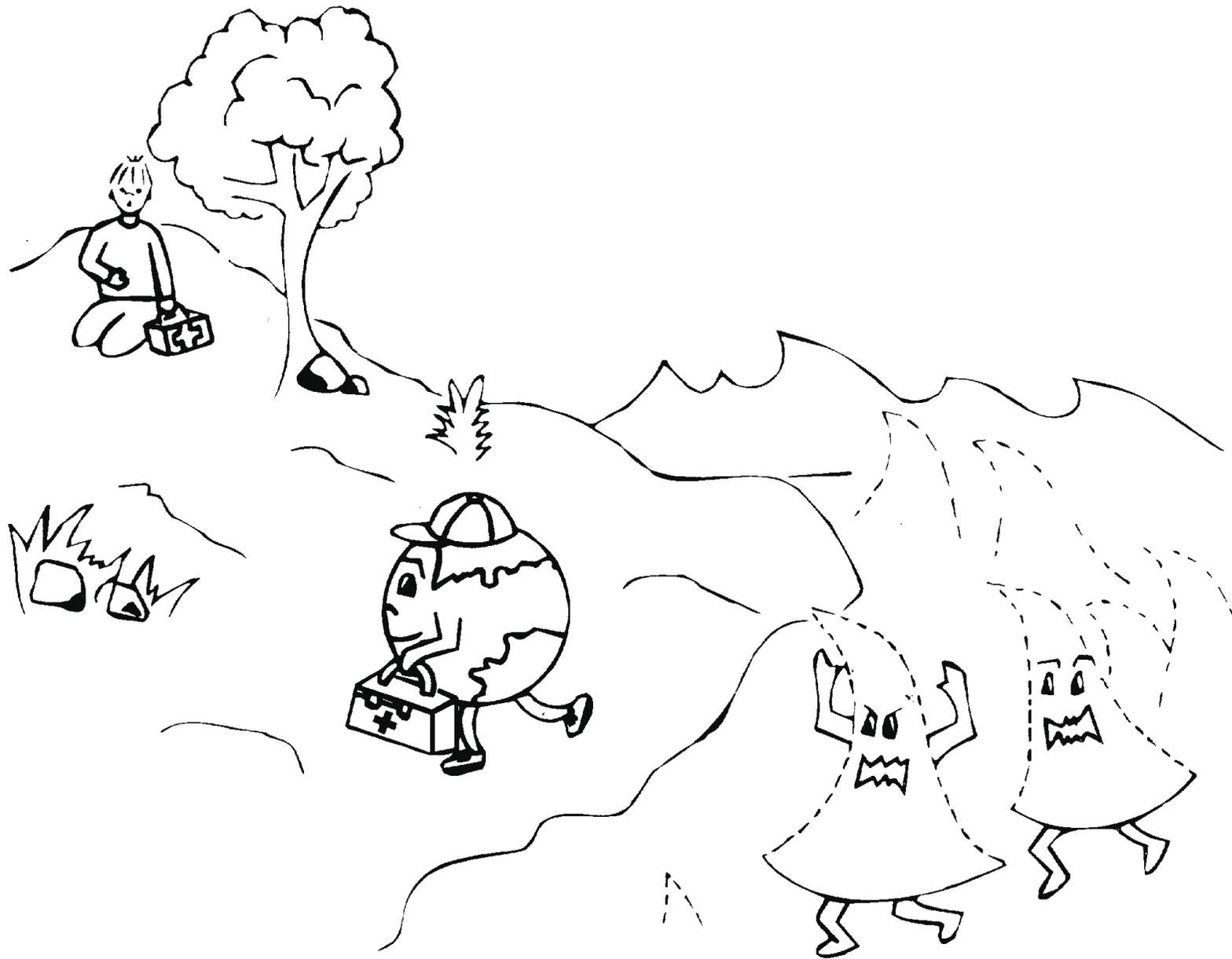


CHAPTER IV
EARTHQUAKES
AND
TSUNAMIS







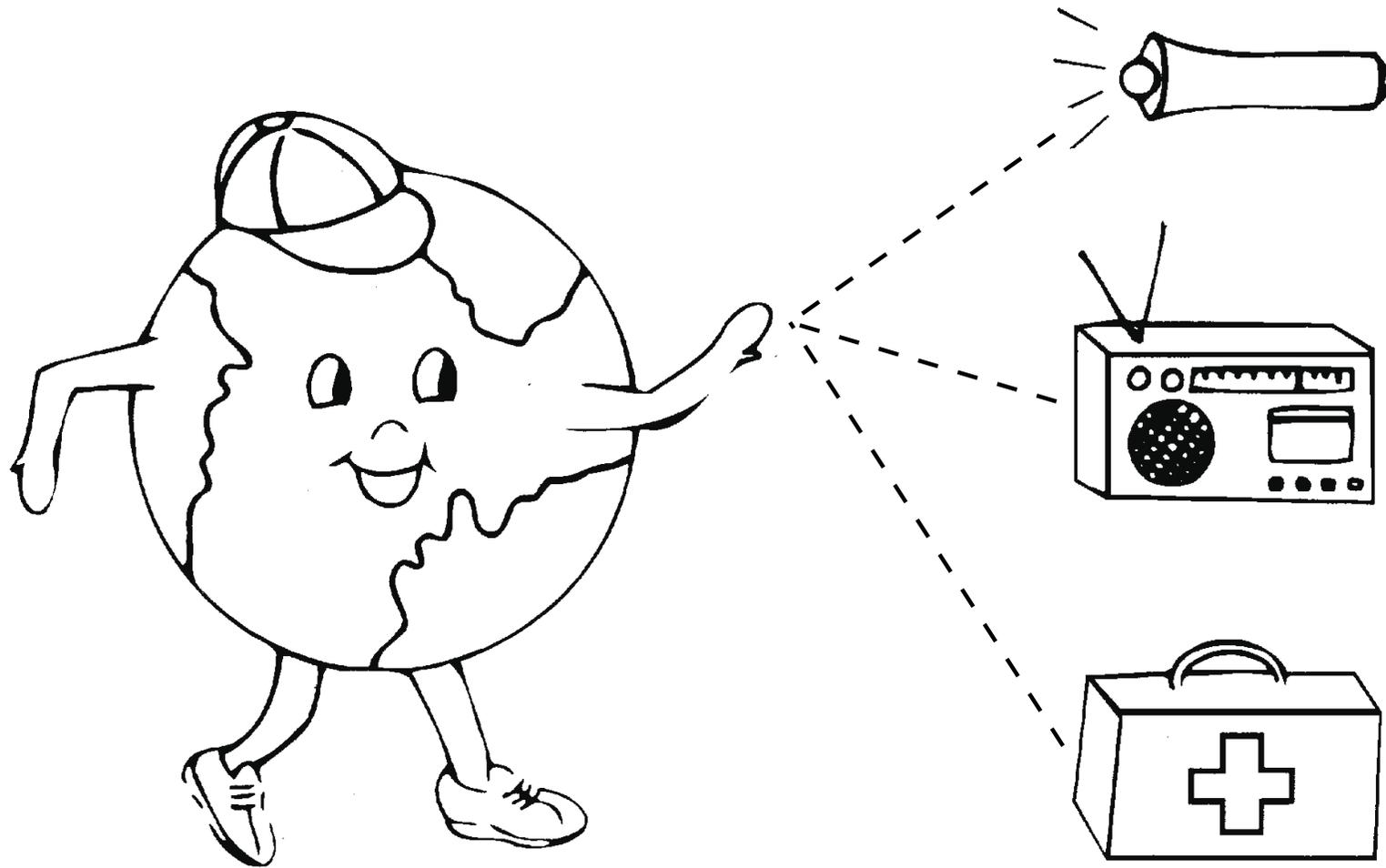


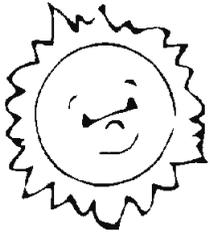
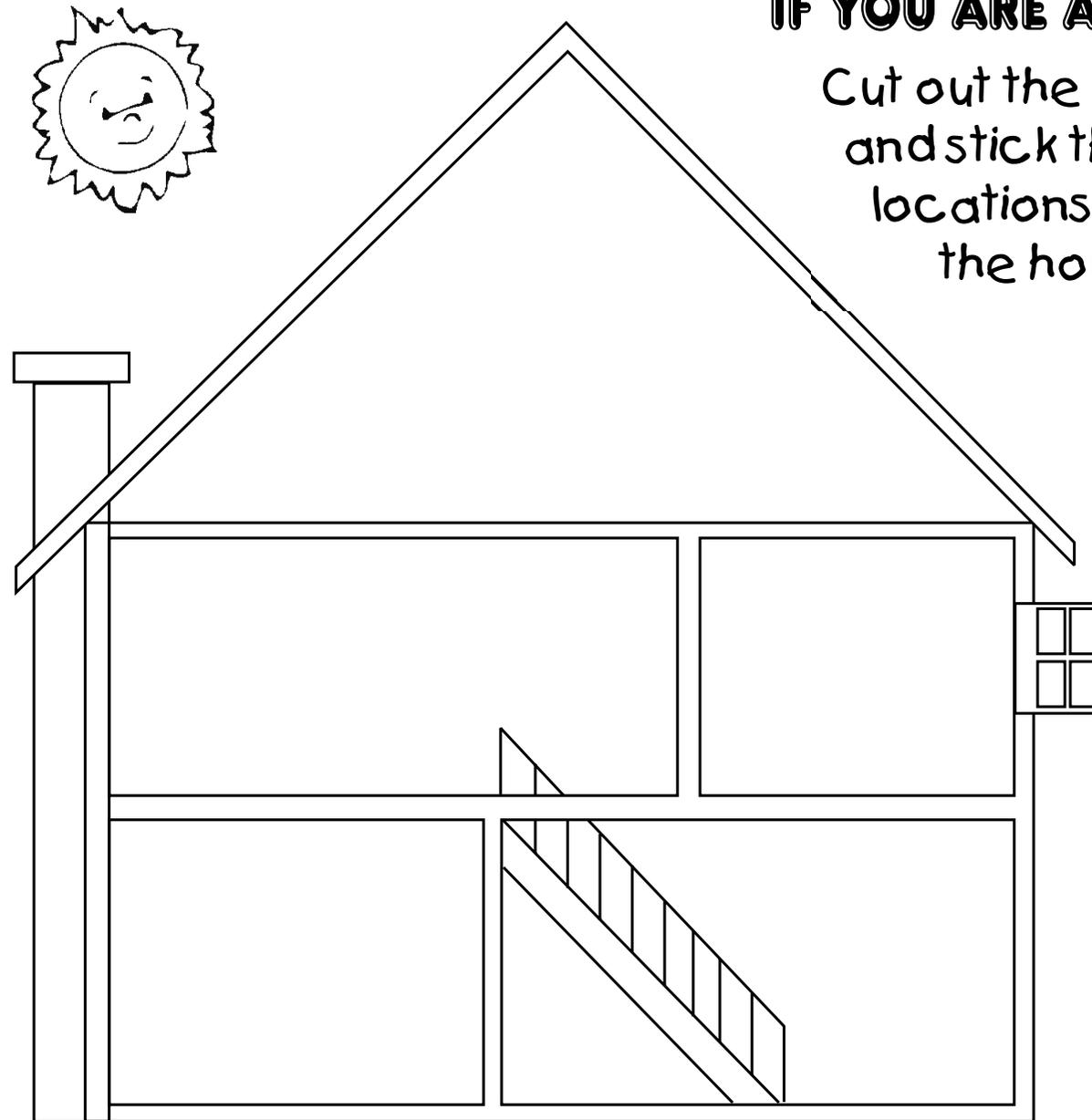


CHAPTER V

HAZARDS PREVENTION

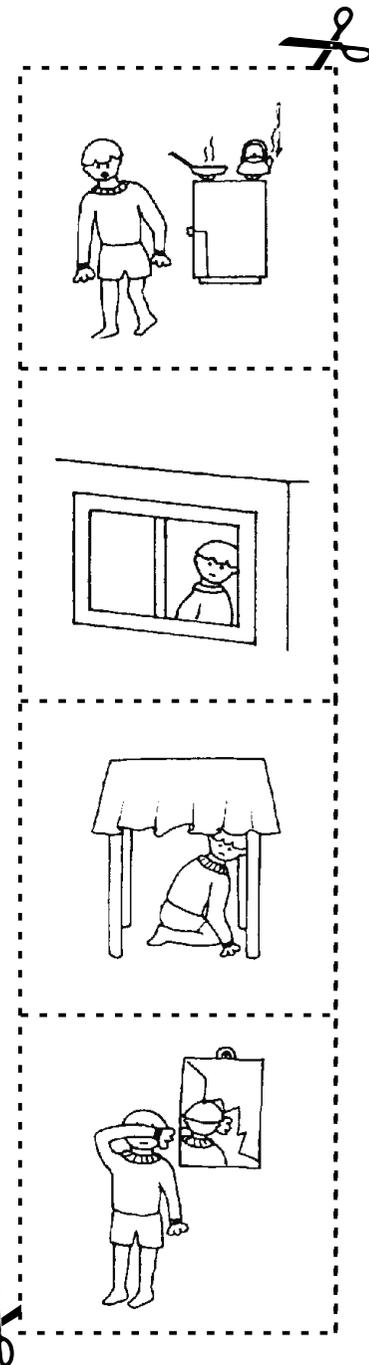






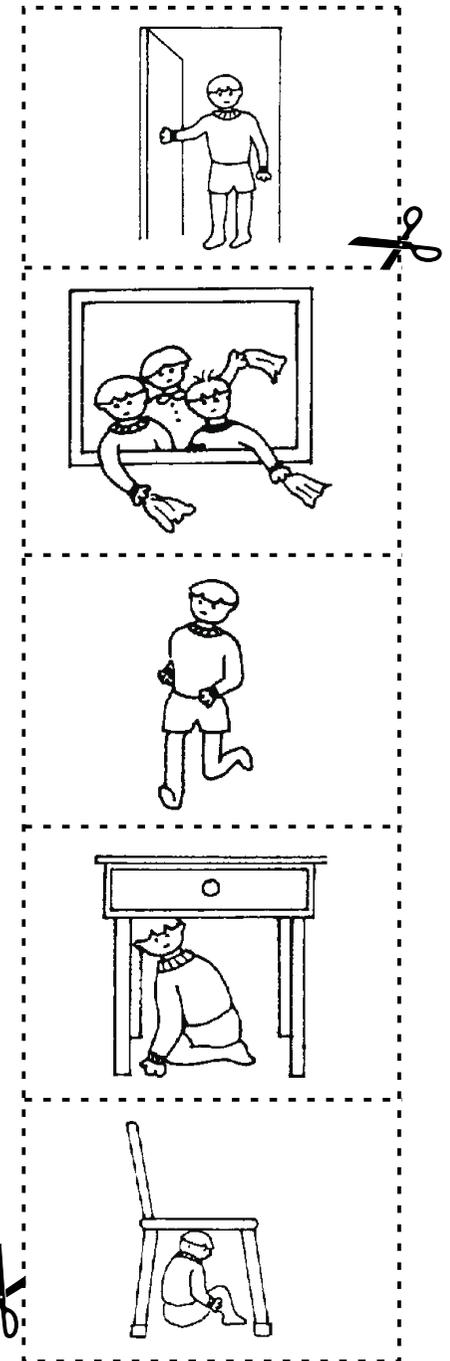
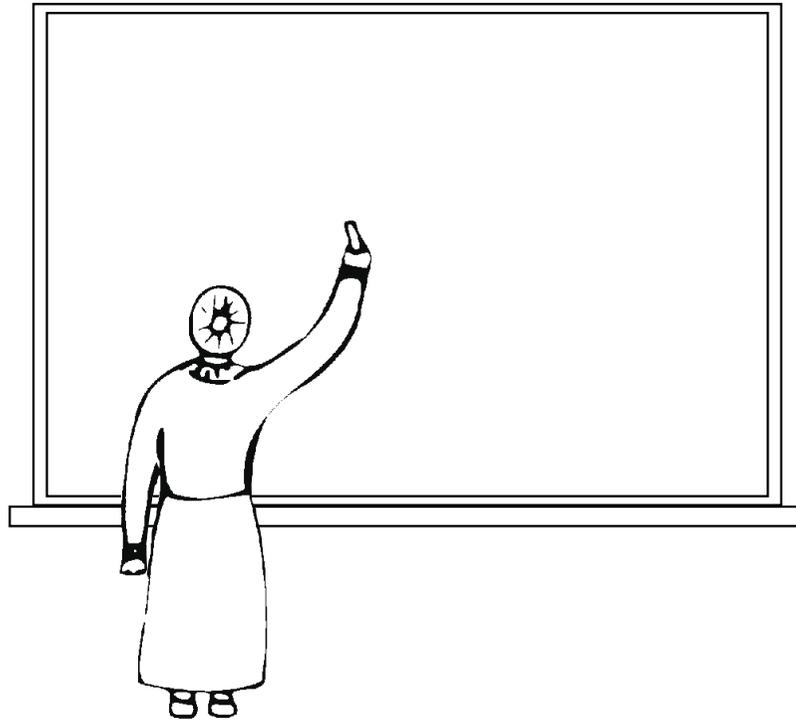
IF YOU ARE AT HOME...

Cut out the pictures
and stick the safe
locations inside
the house



IF YOU ARE AT THE SCHOOL...

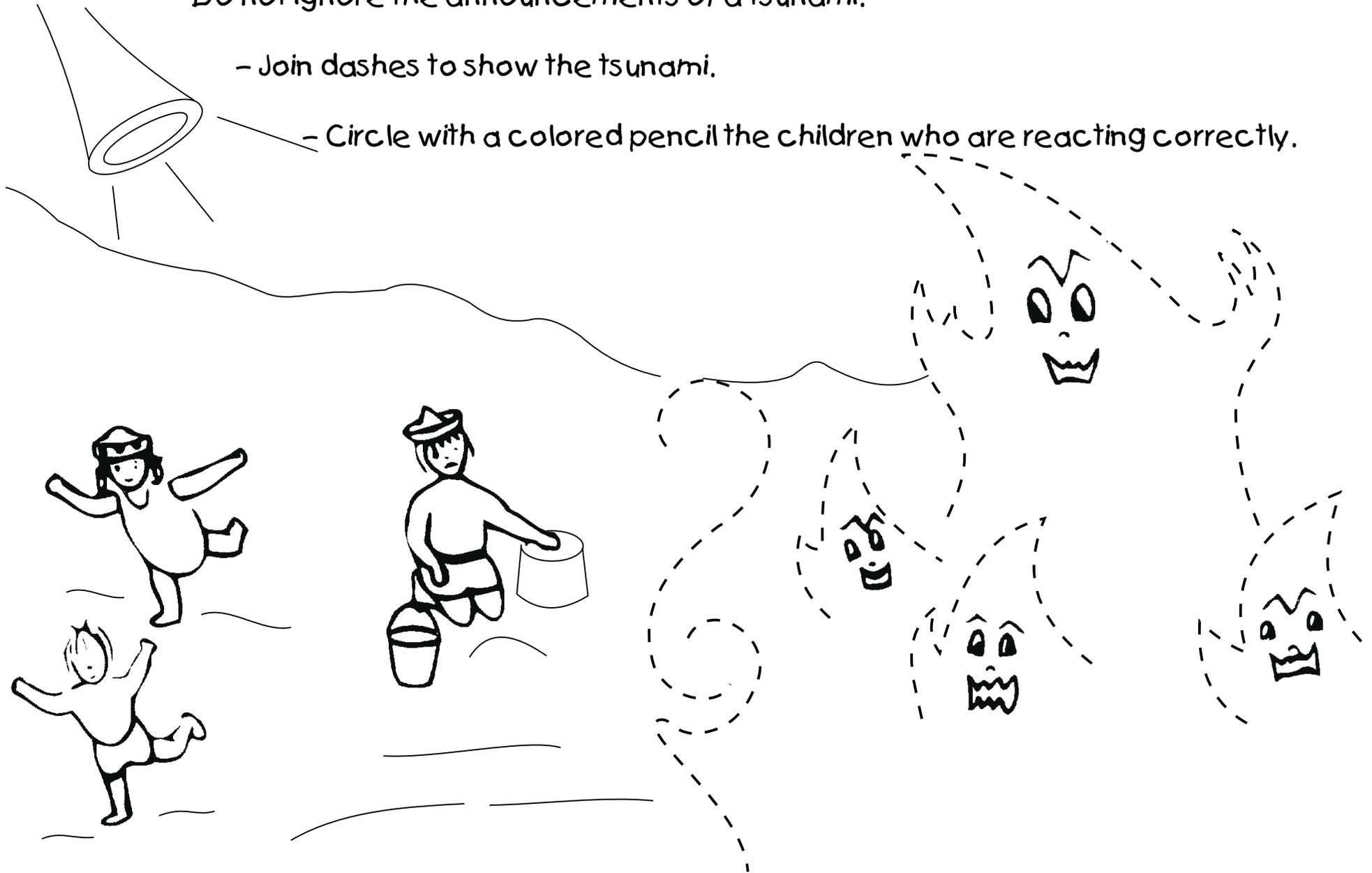
Cut out the pictures and stick the safe locations on the teacher's blackboard.



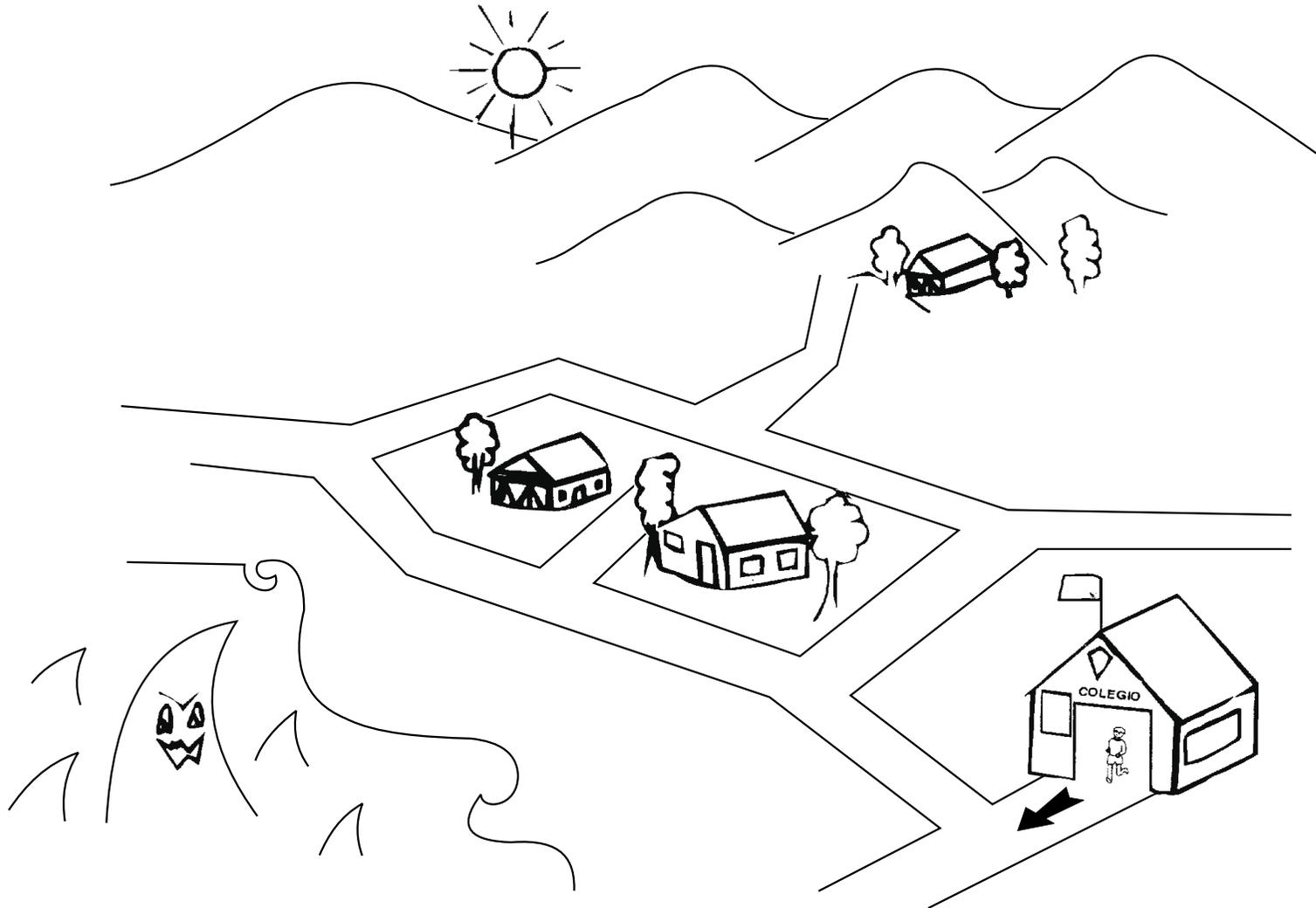
- Do not ignore the announcements of a tsunami.

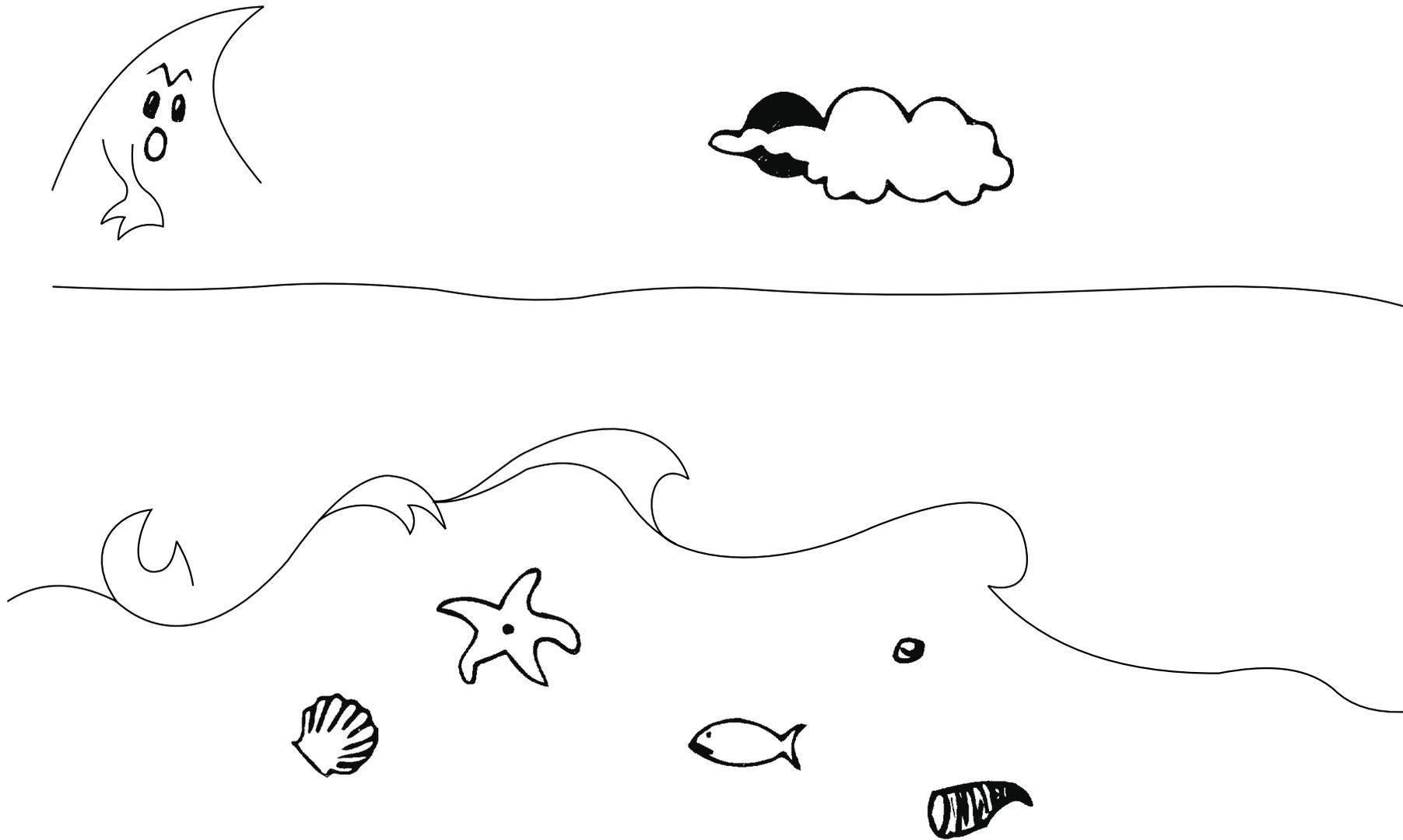
- Join dashes to show the tsunami.

- Circle with a colored pencil the children who are reacting correctly.



- Mark with a colored pencil the shortest way from the school to the hill.
- Color the tsunami waves.





HERE WE SAY... GOOD-BYE!!



Johnny Shaking and Tommy Tsumi