

Fall 2015

Trees
and
Weather
(3rd Edition)

3-1

What is the weather ^{air outside}
today? ^{now}

Teacher: sunny

partly cloudy

overcast

rainy

snowy



Note: Could do monthly entry to note changes.

3-1

Today is rainy and
cloudy. I feel rain
on my face.

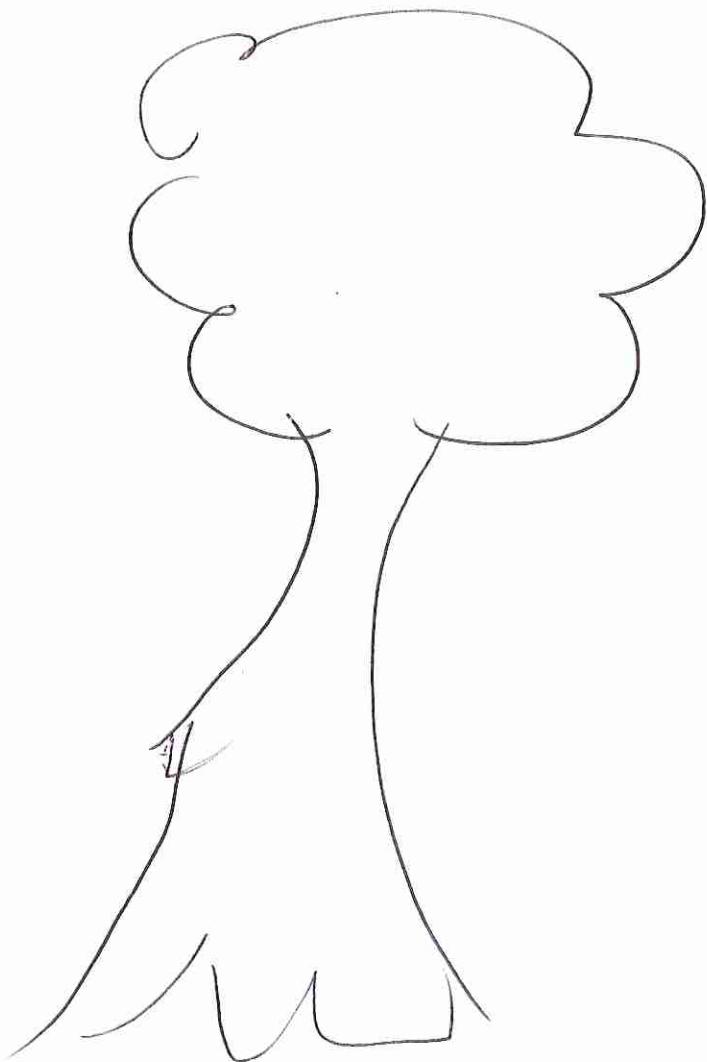
or

T is R n y

1 - 1

What do you know about
trees? plants

- * students draw a tree used as a pre-assessment.
Will do 3x a year to assess growth.



1-1

A tree has leaves.

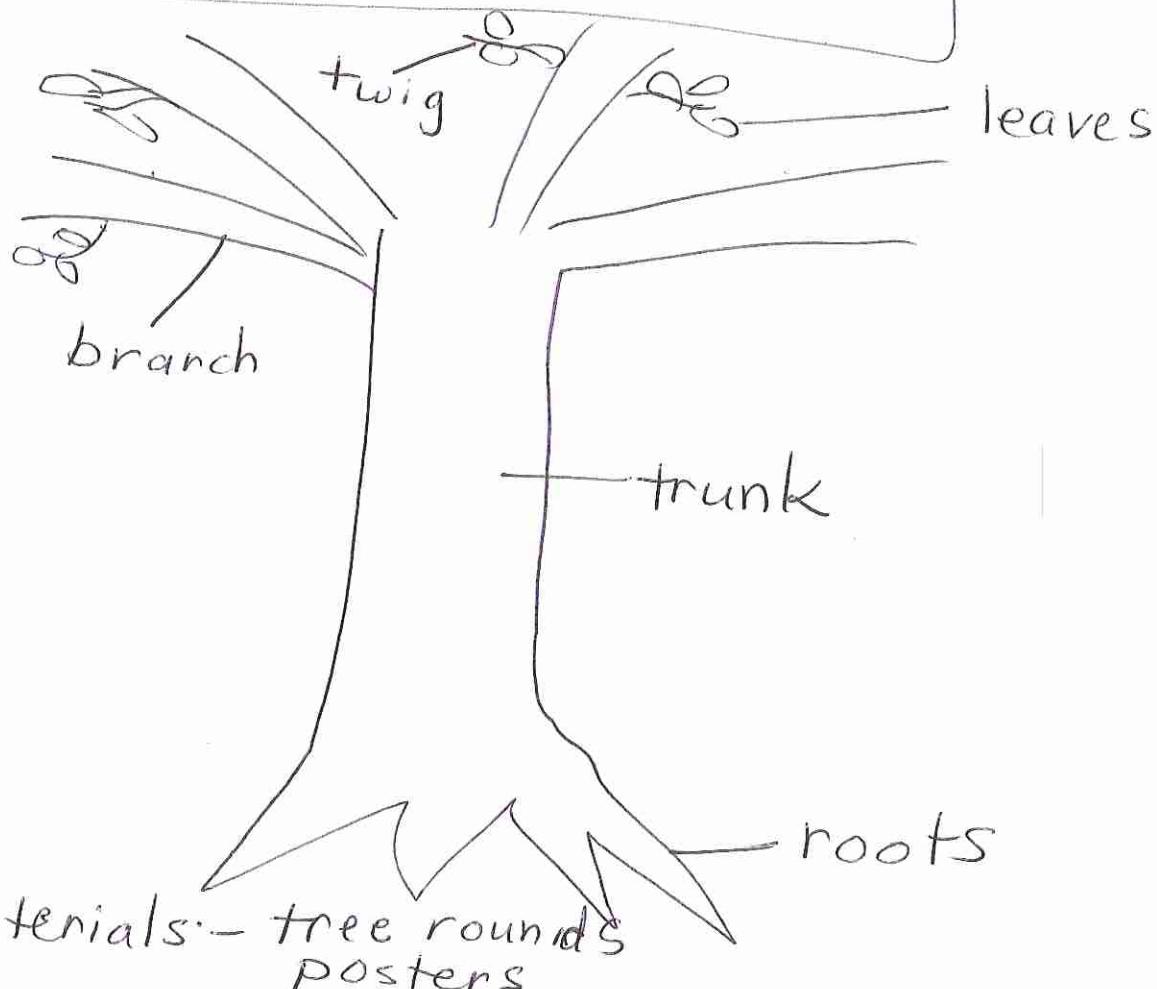
I-1 cont.

+ Science senses

What did you learn about
our schoolyard trees?
Plants

Teach

- Trees are plants
- Trunk is a big stem
- 4 main parts of a tree
 - trunk
 - branches - twigs
 - leaves
 - roots



Materials:- tree rounds
posters

1-1

I observed our tree
has leaves and branches.

or

I observed lvs.

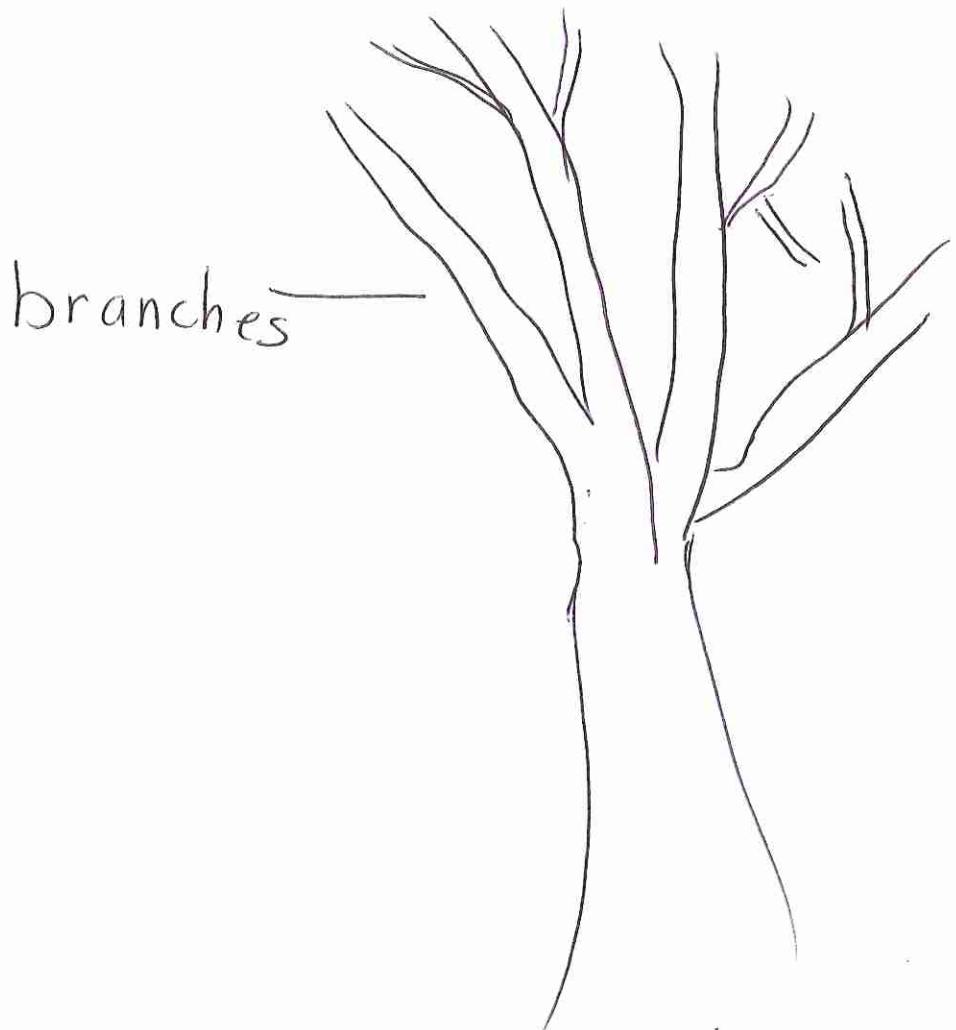
Or

I observed an ant
on the tree.

1-2

What are the ^{pieces} parts of
a tree?

Choose one part to illustrate
from Tree parts cards



branches

or do whole tree.

1 - 2

I observed a tree has
lots of branches.

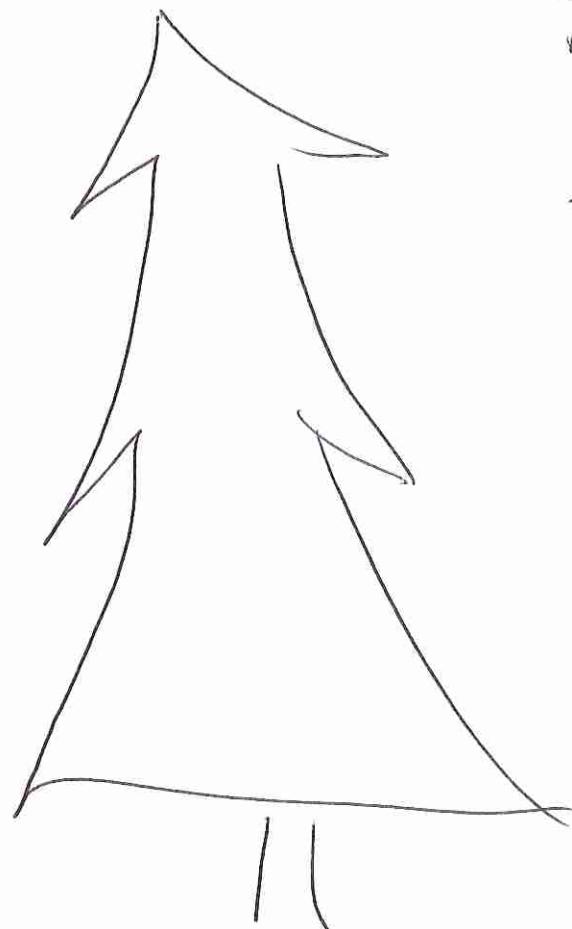
Or

I noticed the leaves
grow on the branches.

or

I noticed lv on br.

1-3 property how they look
What shape are trees?



DAY 1

Tree puzzle investigate

DAY 2
(whole class)

		trunk leaves tall
apple tree	Palm tree	
fat leaves all over	skinny leaves up high	

Day 3

Shape is a property
of a tree

Tree silhouette
Memory
Game

1-3

I observed trees have many shapes. Some are tall but others are not tall. I wonder why that happens.

or

It reminds me . . .

1-4

Which trees have similar shapes?

Tm 8 (Tree-silhouette cards)

Center activity

Sort trees into groups
by shape and glue on
large paper. Then glue
in notebook.

Turn + talk - class
discussion of how sorted.

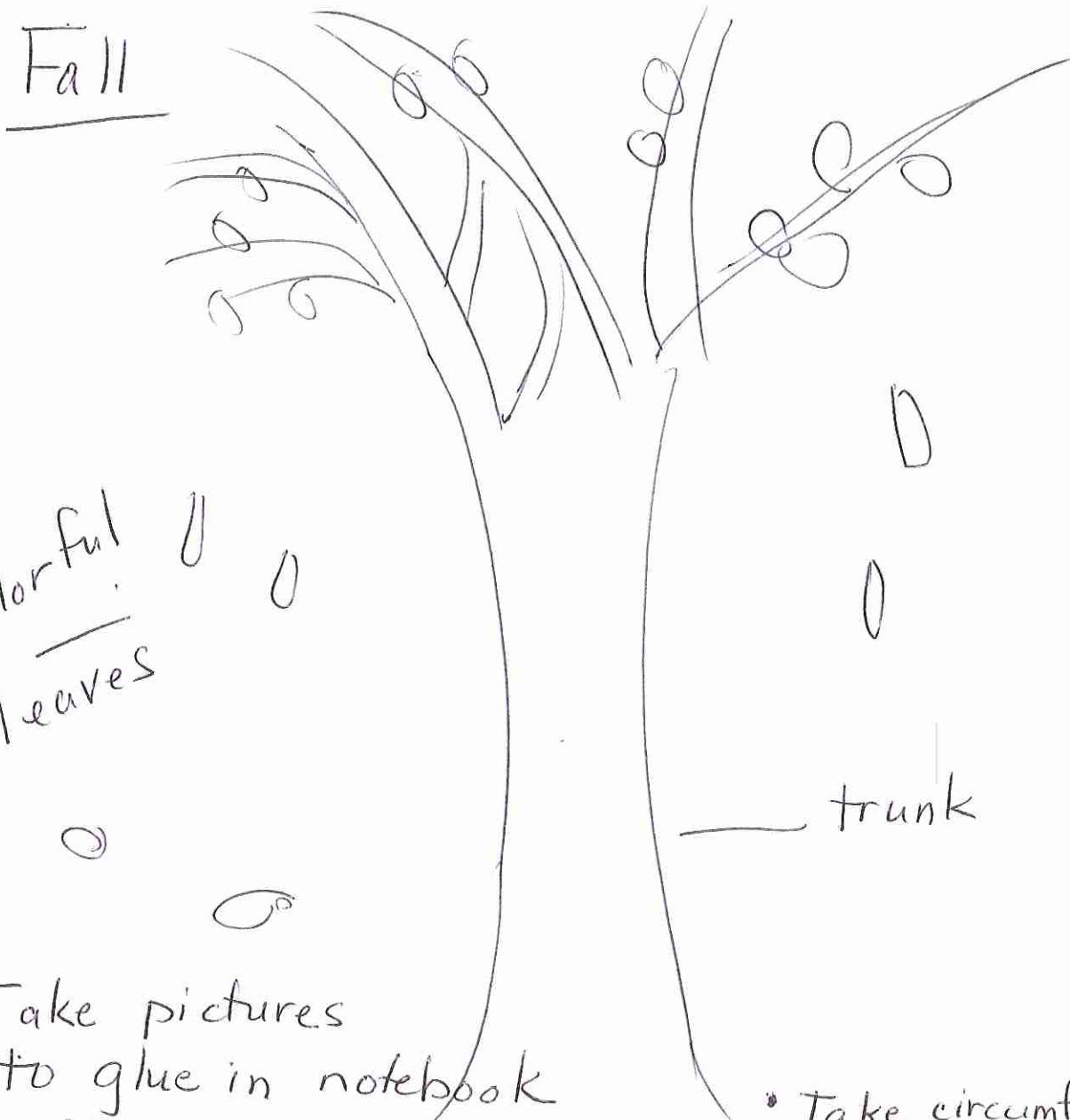
1 - 4

Whole group
discussion

1-5

What can we find out about
our adopted tree?

observe
~~senses~~



- * Take pictures
 - . to glue in notebook
 - . or
- * make a foldout seasonal chart
- * Reading + {Habitat cards
Landform}
- * Take circumference w/string.

1 - 5

Fall

I adopted a maple tree.
I notice it has red
leaves in the Fall that
are falling on the ground.
Also I saw a bird's nest
in the branches.

Winter

Spring

Q-1

What can we observe
about leaves?

parts of tree

eyes

/

properties

- * collect 6 dif. leaves
- Work in pairs sorting.
- Pick one way to illustrate a sorting.
{ or glue

Size

Shape

edge (smooth,
toothed,
lobed)

tip shape

(rounded
or
pointed)

texture



2-1

I observed I can sort
my leaves in lots of
ways. My data shows
how I sorted them by
pointy tips. I wonder...

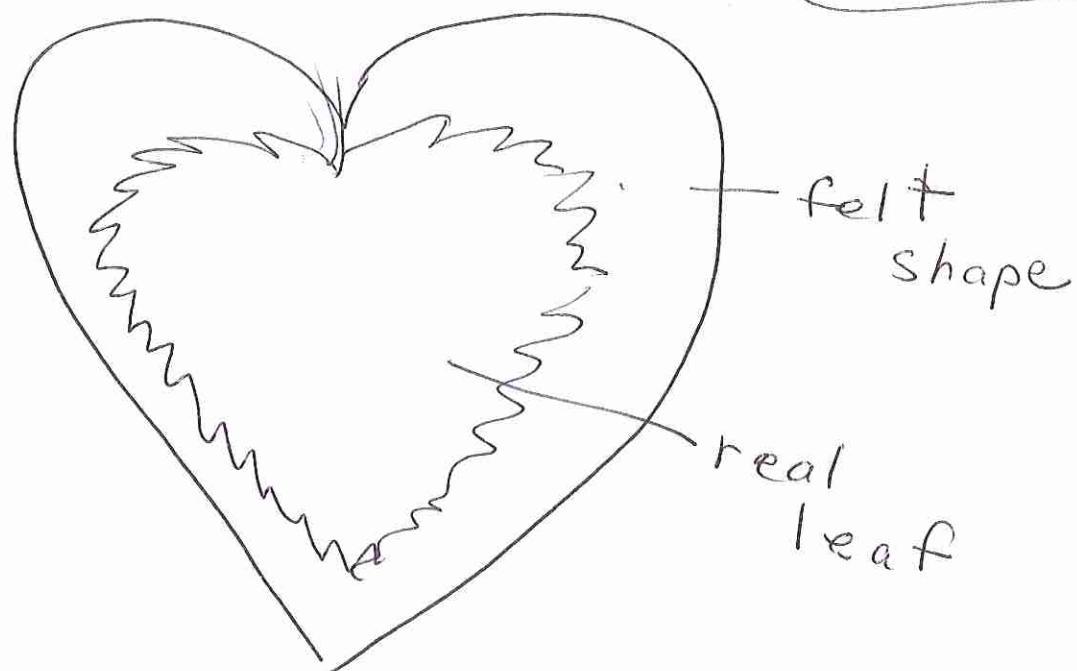
2-2

property
What shapes are leaves?

(Felt leaves)

Leaf-sorting mats w/real leaves

spear
oval
heart
line
triangle
paddle



2-2

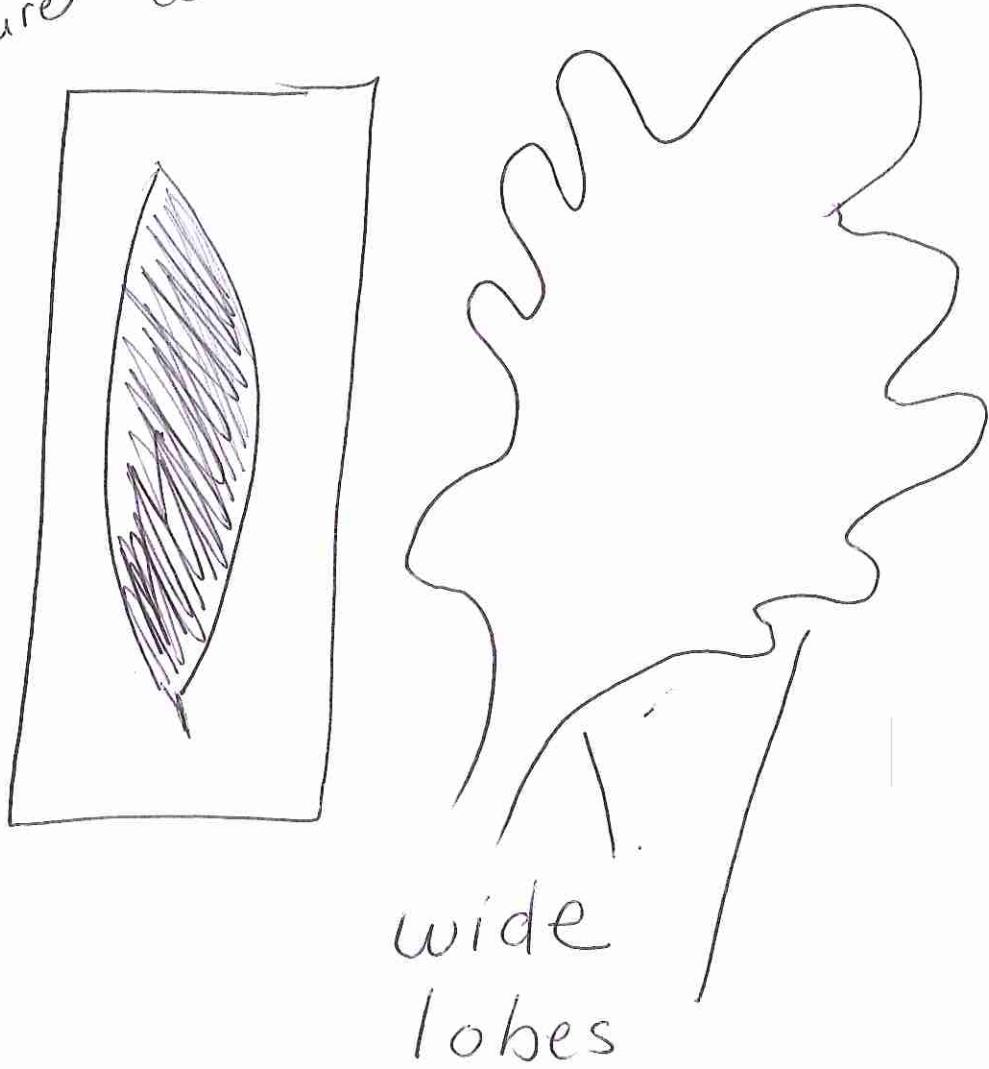
I observed my leaf
Shape is a heart. I know
this because my leaf
fit inside the heart.

It surprised me that some
leaves can be more than
one shape,

2-3

How are leaves different? ^{not same}

Paste TM 18
picture for comparison



2-3

My leaf is different because it is wider and has a lobed shape. I wonder what tree it came from.

2-4

How are leaf edges
different? ^{sides}

Center activity
with leaf silhouette games.

2-5

Leaf books

Center Activity

Read Our Very Own Tree
for review

4-1

season
What do ~~fall~~ trees ~~look~~ like?
eyes

Active Outdoor Session →

Things Found under Trees

Seeds	Leaves	Twigs	Other	Not from a tree

Whole group chart
on floor!

4-2

Active Center Investigation
of seeds in fruit

Reading: My Apple Tree

4-3

Outdoor Session of
visit to adopted tree.
(Mark a twig for
future investigations)
(changes in seasons)

4-4 What do ^{season} winter trees look like?

Evergreen Outdoor Hunt

(Need evergreen samples laminated
for reference cards)

Class chart of evergreen leaf types.

- leaves wide and flat
- leaves long and pointed
- tiny, pointy leaves → scales
- ..
- .

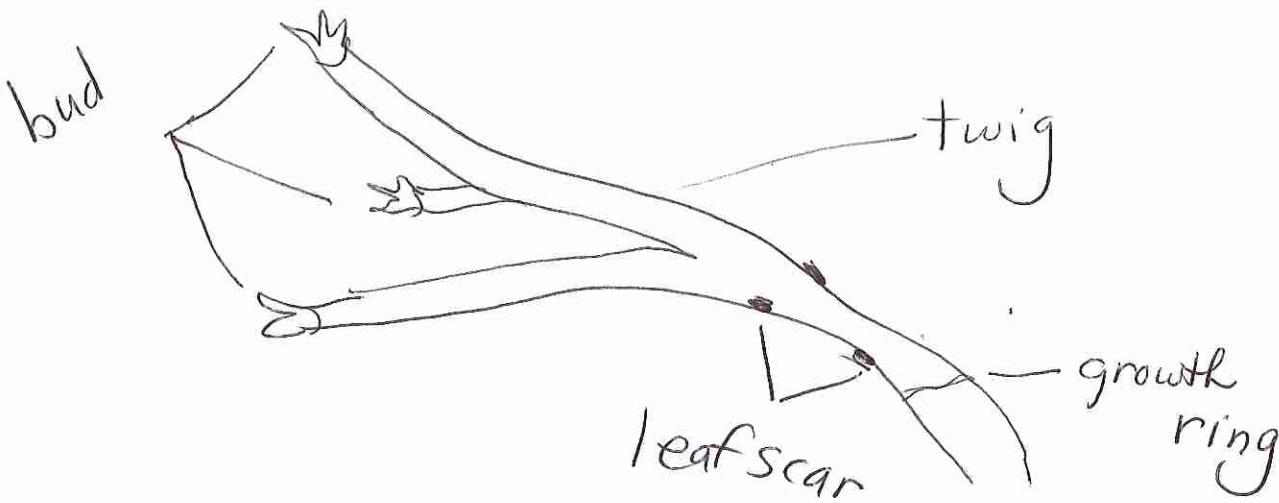
see
background
for
teacher

Reading "Orange Trees"

4-5

Examine and Investigate
winter twigs.

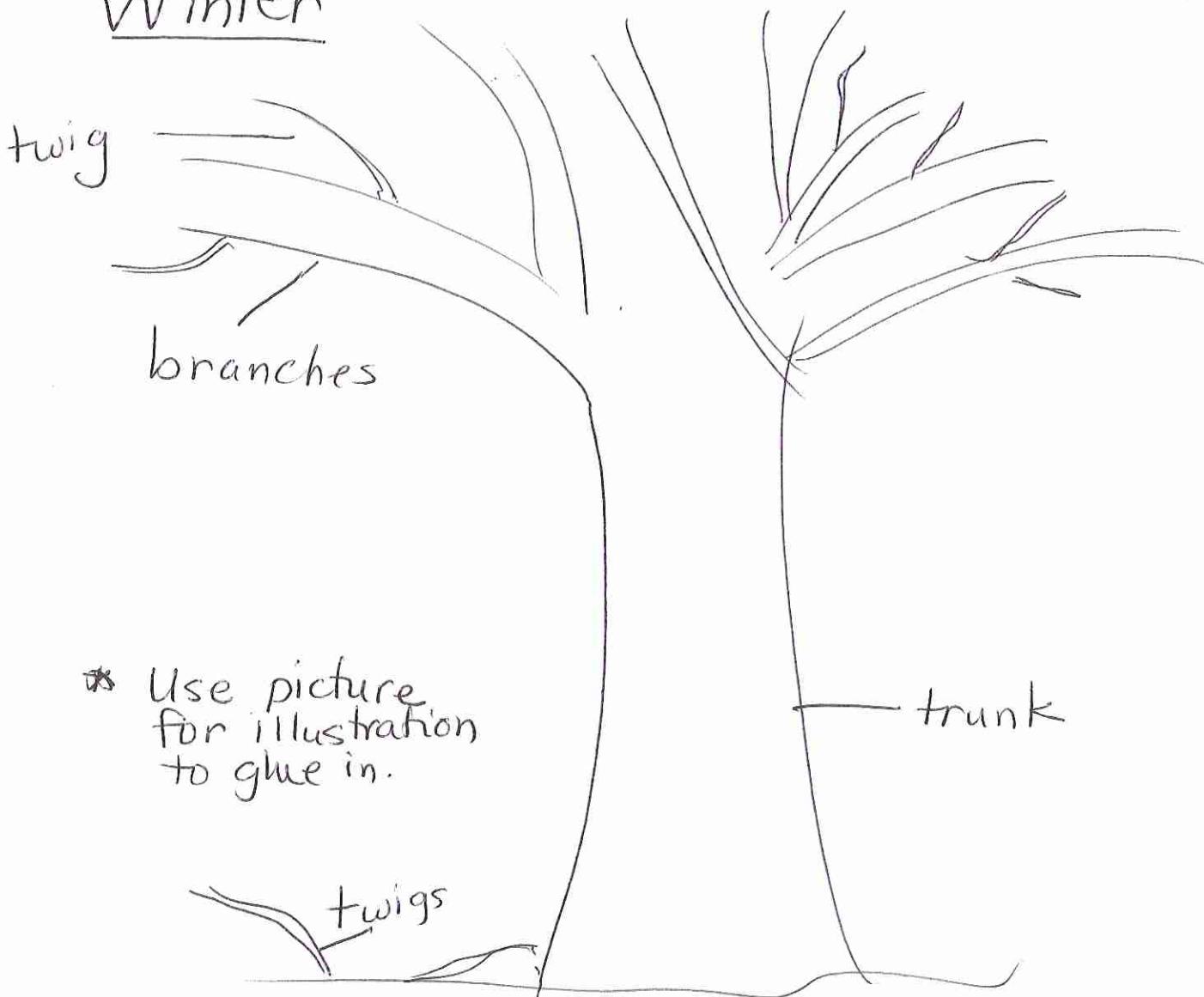
Vocabulary: bud
scar
growth ring



4-6 What do winter trees look like?

Return to adopted tree for
winter observation.

Winter



- * Use picture for illustration to glue in.

- * Be sure to note how evergreen trees are still green.

Winter

I observed my adopted tree in Winter. I noticed it has no leaves and bare branches. Also, I observed some twigs on the ground next to the trunk. It reminds me of ...

3-2

How can we measure
the air temperature?
weather

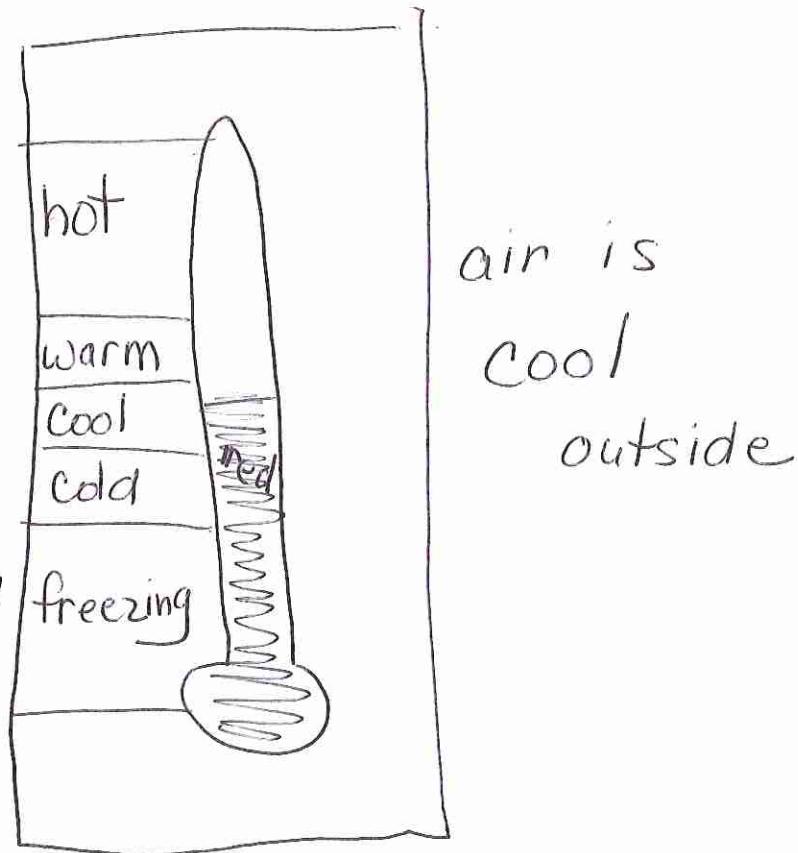
how much, big?

how hot or cold

Glue
in
outline
(color coded)

TM 24

OR
(see TM NMaster 7
in Air+Weather)



* One month/week - Keep a temperature bar graph to show changes.

3-2

We measure air temperature with a thermometer. When the red lines moves up, the air is warmer but when the red line moves down, the air is colder. Today is a cool day because my evidence is the red line is in the yellow zone.

or

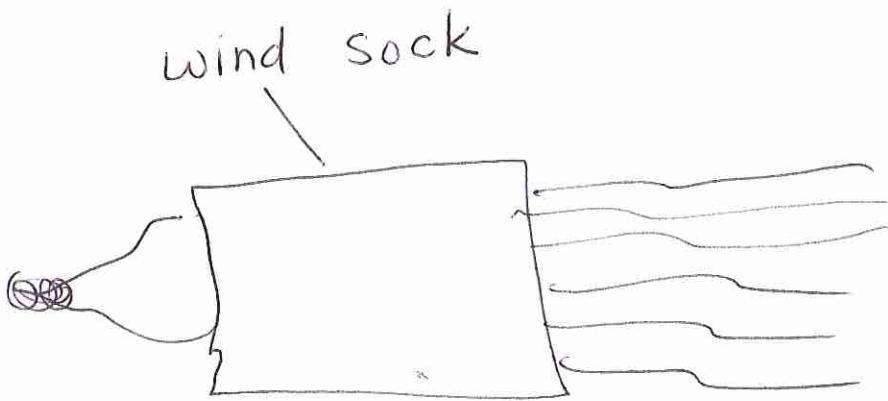
red up = hot

red down = cold

Today is cool.

3-3

What does a wind sock ^{tool} show tell us about the wind ^{moving air}



direction

on

Key

0 = no wind

1 = some wind

2 = lots of wind (Class Chart)

M	T	W	Th	F
1	1	3	2	2

3-3

A wind sock tells me
what way^(direction) the wind is
blowing. My evidence is

I watched my wind sock
outside and the streamers
were blowing like the flag.

or

A wind sock tells me

how hard the wind is

blowing. My evidence is

the streamers stay straight
sometimes and sometimes
wave like a flag.

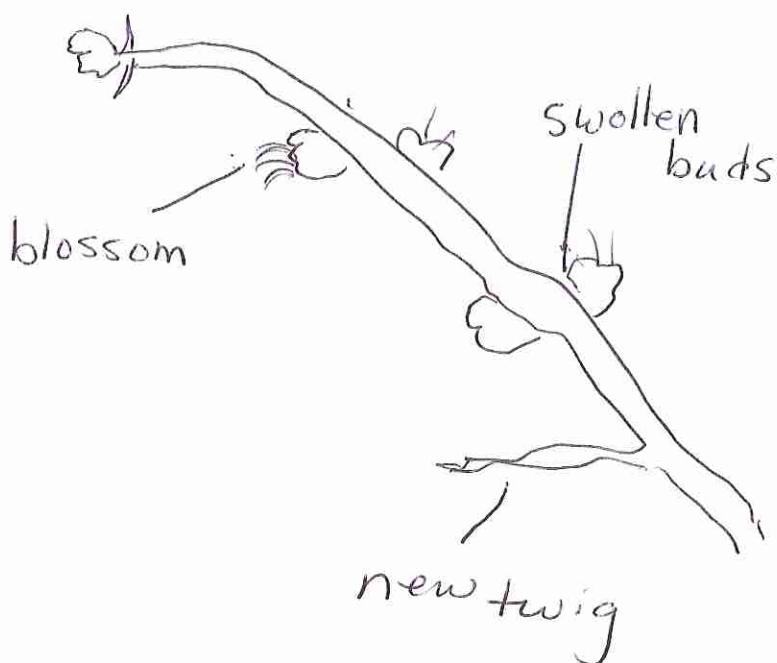
Reading "Weather"

4-7 What do Spring trees look like?

Forced Twigs - Center Observation

	Winter Twigs	Spring Twigs
Class char	little buds brown no blossoms 1 twig	fat buds green blossoms new twigs off old one

Notebook:



First I noticed little buds
on the twig in winter. Now
I notice fat swollen buds
that are beginning to
open.

or

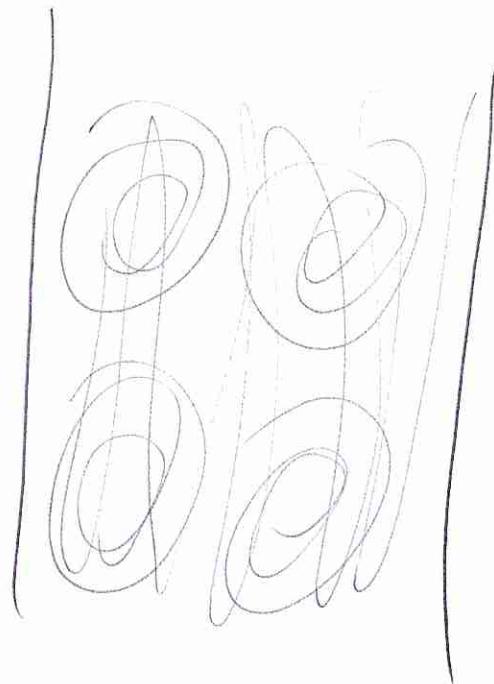
In winter, I noticed one
twig. In spring, I noticed
a new little twig coming
out from the old one.

4-8 What does your bark <sup>part
of
trunk</sup> look like?

Active Outdoor Session

Bark Hunt (Pictures available for hunt)

Students do rubbings to include in notebook.



4-8

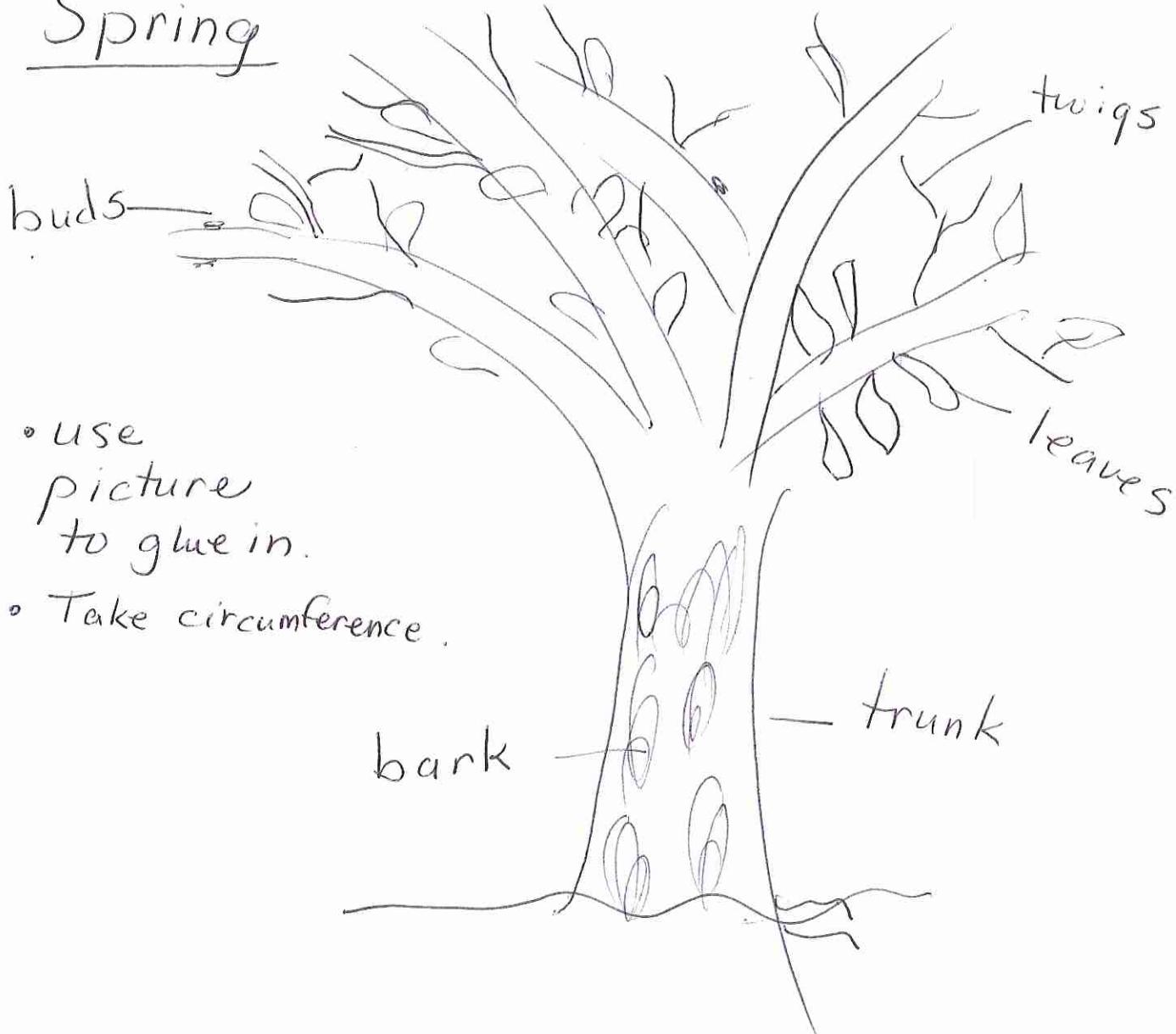
My bark rubbing looks
like a lot of circles
twirling together. It
surprised me how bark
looks so different on trees.

4-9

season plants
What do Spring trees
look like?

Return to adopted tree for
spring observation.

Spring



4-9

I observed my adopted tree in Spring. I observed lots of buds on the branches and new twigs. Also, I noticed new leaves on my tree.

I wonder.

It surprised ^{or} me that the circumference of the trunk was fatter.

Reading Research

Re-read My Apple Tree

Read Maple Trees

1-6

Tree Planting Ceremony