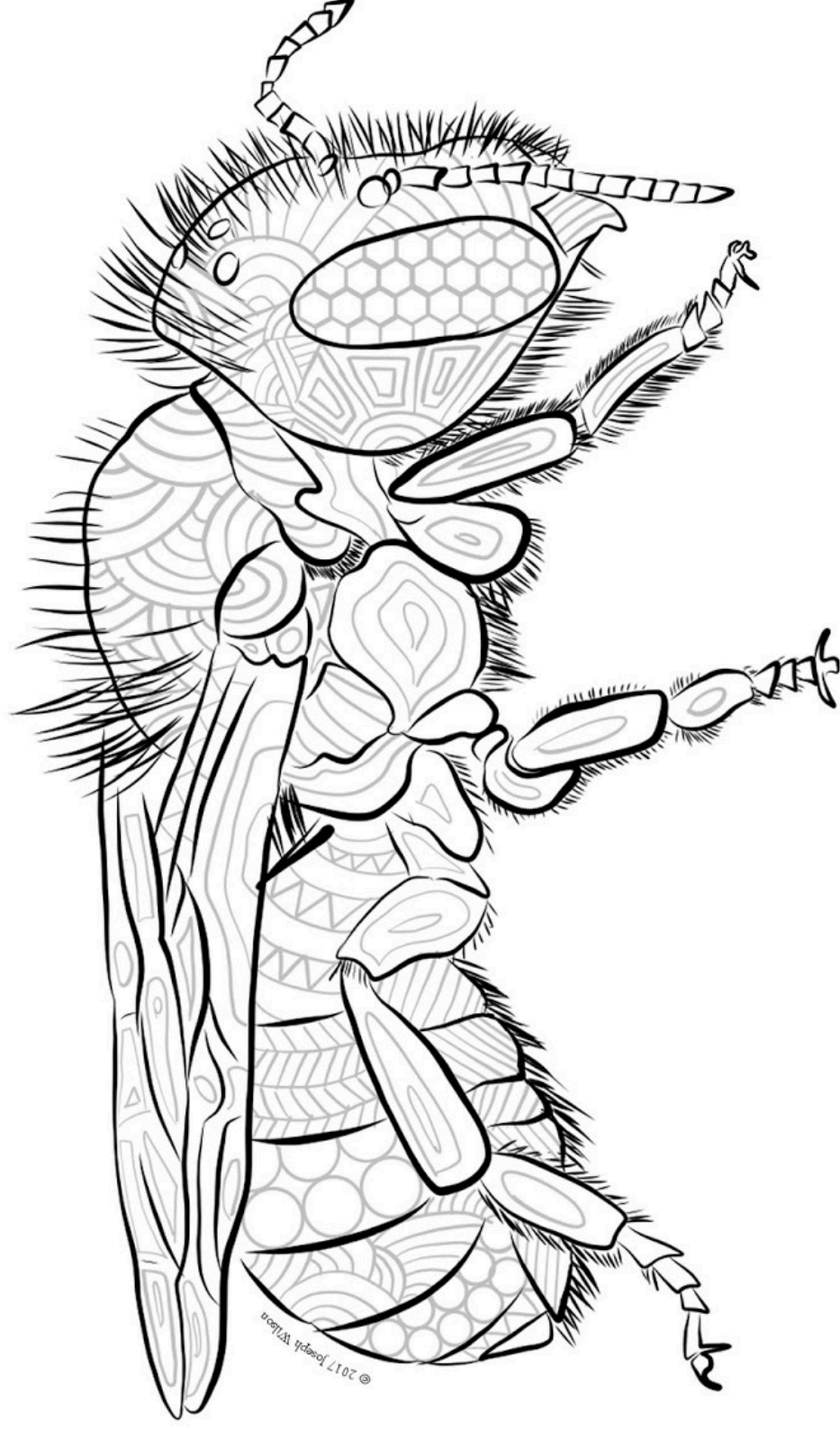


Mason Bee (*Osmia*)



The genus *Osmia* includes some of the most economically important bees in North America, responsible for pollinating many orchards and fruit crops, and for picking up the slack when honey bees fall short. Some species will build nests entirely from mud, thus earning them the common name 'Mason Bees'. To learn more about mason bees and their relatives, check out "**The bees in your Backyard**" by Joseph Wilson and Olivia Carril.



Sac County Conservation
KneeHigh Naturalist

Bee Kit

What's in here?

- Activity Booklet
- Bee Guide
- Mason Bee House Craft
- Pollinator Activity
- Bee Eraser
- Bee Inspired Snack

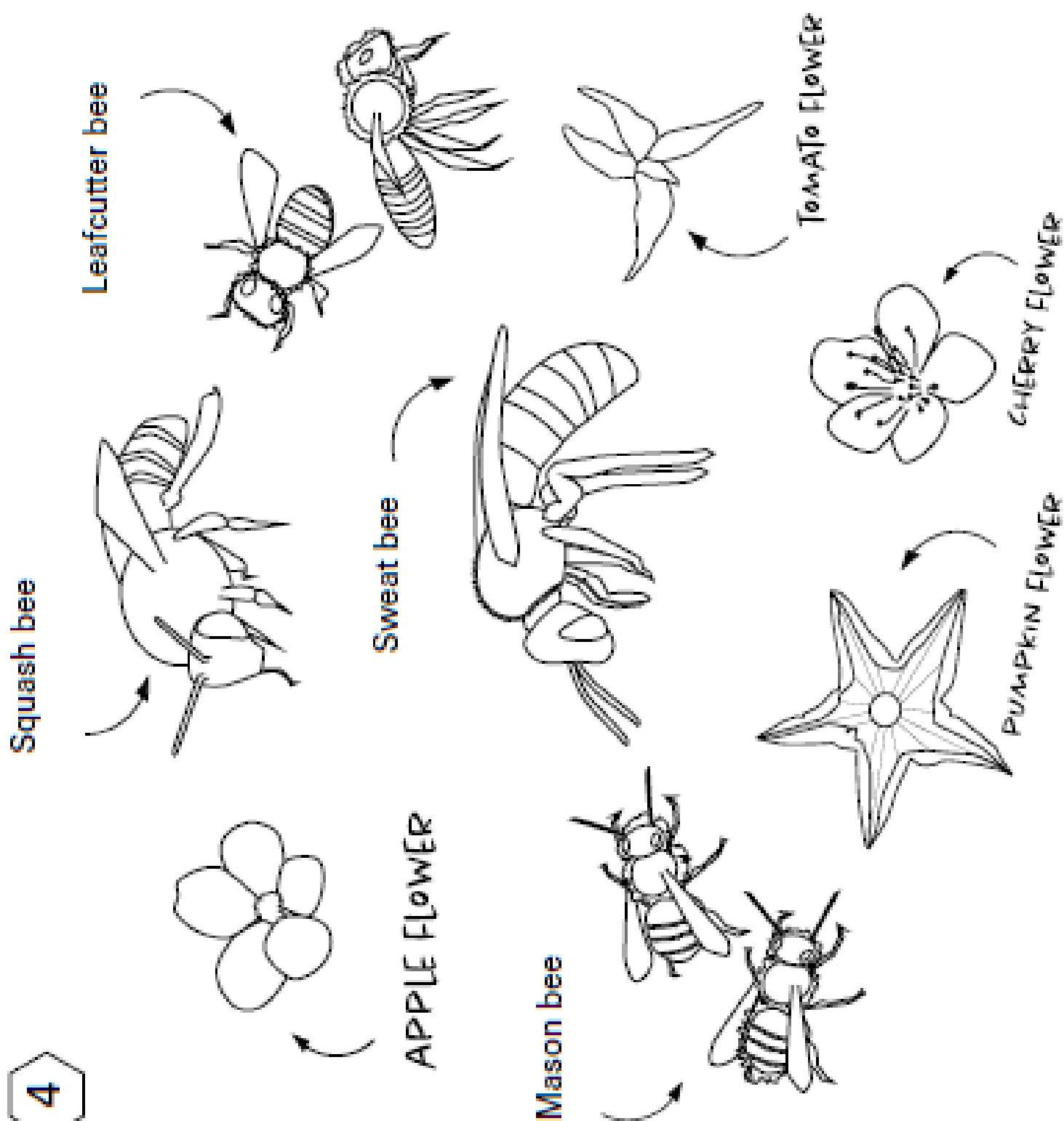




Use the pencil provided to
help you roll the paper

Bee Craft

CREATE A MASON BEE HOUSE! USE THE PAPER PROVIDED AND TAPE IT INTO ROUND TUBES BY ROLLING IT AROUND THE PENCIL. IF ROLLING IT SEEMS DIFFICULT TRYING ROLLING THE PAPER THE OTHER DIRECTION. WHEN DONE ROLLING ALL THE PAPER TUBES DROP THEM IN THE CARDBOARD TUBE. DECORATE AS YOU'D LIKE THEN PUT IT OUTSIDE AND KEEP AN EYE ON IT TO SEE IF BEES MOVE IN!

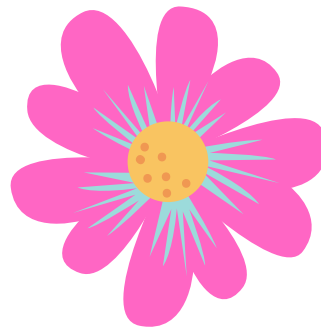


Bee Activities

BEE HIKE

BEES EAT NECTAR OUT OF FLOWERS AS THEY VISIT FROM FLOWER TO FLOWER THEY SPREAD POLLEN. SPREADING THIS POLLEN HELPS FLOWERS TO PRODUCE SEEDS. THOSE SEEDS WILL CREATE NEW FLOWERS. CAN YOU FIND THESE PARTS OF A FLOWER'S LIFE CYCLE?

Seed



Flower

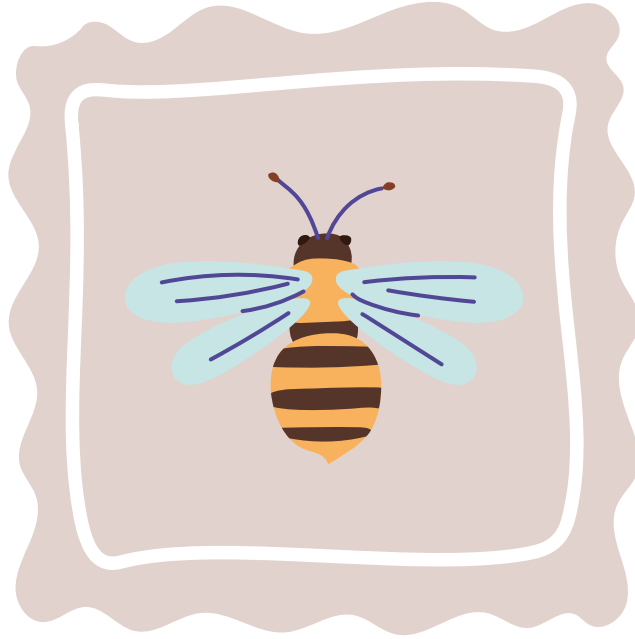
Leaf



Bee

POLLINATION GAME

KIDS WILL VISIT FROM PAPER FLOWER TO PAPER FLOWER AS AN ADULT STICKS PAPER POLLEN TO THEM. WHEN ALL THE POLLEN IS GONE TAKE A LOOK TO SEE WHERE IT ALL LANDED. THEN QUICKLY AS HONEY BEES PICKUP ALL THE POLLEN AND CARRY IT BACK TO THE HIVE "THE ADULT"



Head Thorax Abdomen

**(TUNE: HEAD, SHOULDERS KNEES AND TOES)
HEAD, THORAX ABDOMEN,
HEAD, THORAX ABDOMEN,
SIX LEGS AND EYES AND ANTENNAE
HEAD, THORAX ABDOMEN,**

**POINT TO THE APPROPRIATE PARTS ON YOUR
BODY FOR EACH OF THE INSECT PARTS. PUT UP
INDEX FINGERS AND WAGGLE THEM FOR
ANTENNA, AND PUT THREE FINGERS OUT ON
EACH SIDE FOR 6 LEGS!!**

Suggested Reading

**Mason Meets a
Mason Bee**
by Dawn Pape

**Bees in Your
Backyard**
Joseph S. Wilson

**Zoe the
Solobee**
by CL Vanderhoff

NATIVE BEES

BEES ARE DIFFERENT FROM WASPS AND HORNETS BECAUSE THEY ARE FUZZY! SOME OF THIS FUZZINESS IS TO HELP THEM COLLECT POLLEN WHICH THEY WILL FEED TO THEIR LARVAE.



Bees use their tongue to suck nectar out of flowers.

BACKYARD BEES



THERE ARE OVER 4,000 SPECIES OF BEES THAT ARE NATIVE TO NORTH AMERICA.



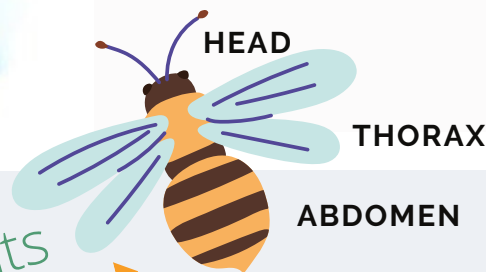
Cold Blooded

ALSO KNOWN AS A POIKILOTHERM WHICH MEANS THEY ABSORB HEAT FROM THEIR ENVIRONMENT.



6 Legs

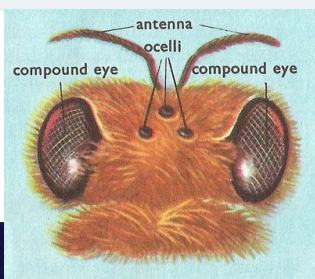
3 body segments



Insect

Invertebrates

THIS MEANS THEY LACK BONES. INSTEAD THEY HAVE AN EXOSKELETON. MEANING THEY ARE HARD ON THE OUTSIDE.



Bees have 5 eyes! 3 simple and 2 complex. Simple eyes (Ocelli) help them see contrast and complex help them see in all directions.

The Rusty Patched Bee was the first insect to be placed on the endangered species list.



Honey Bees are not native North America. 70% of native bees are ground nesters and 30% make nests in hollowed stems. No native bees make honey or live in hives.

LIFE CYCLE OF A BEE



They start out as an egg which hatches out into a larva, then they go into a cocoon where they metamorphose into an adult bee. This is all done inside their cavity where the bee that laid them has left behind pollen for them to eat until they become an adult.