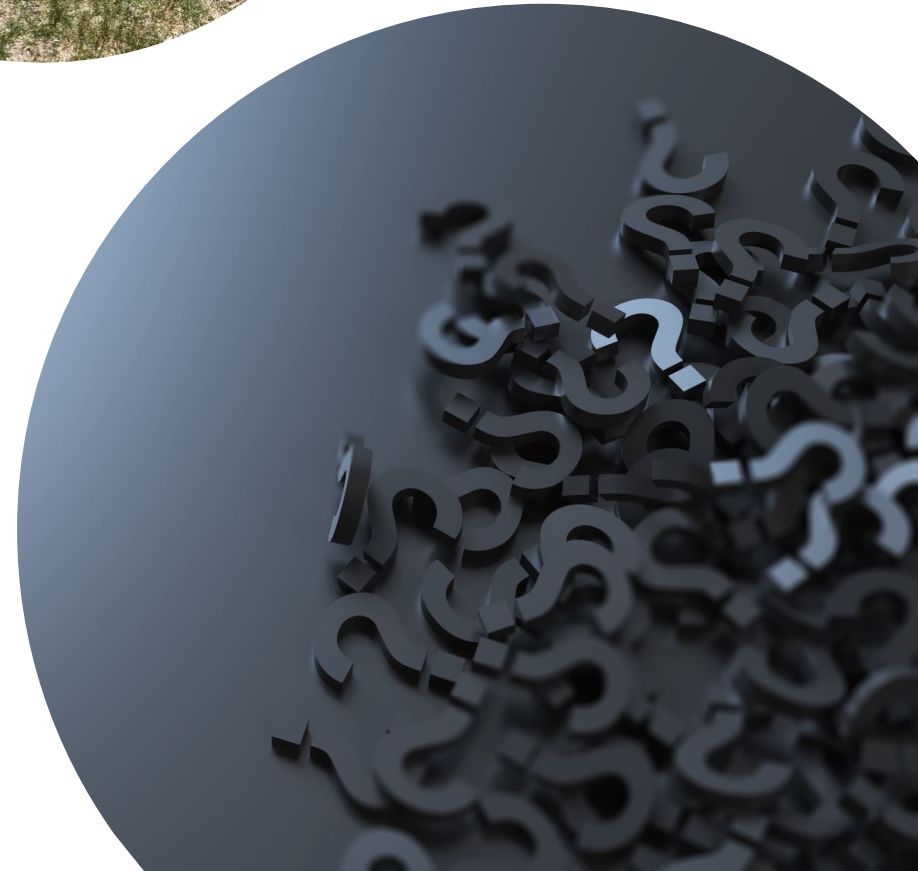
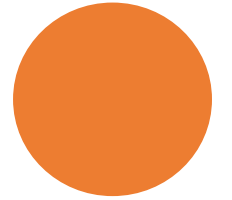


# LESSON 14

## QUESTIONING QUESTIONS

- OBSERVE a natural phenomenon and explore a process for asking varied and interesting questions.
- This activity takes us through a “curiosity crash course,” beginning with asking questions from observations, then using a question generator to ask more varied questions.





# Questioning Questions Procedure Summary

- Use words, pictures and numbers to record observations, leaving space around the page.
- Use the question generator “Who, What, When, Where, How, and Why” to ask as many questions as possible and do not worry about answering them.
- Start by asking questions about the phenomenon you sketched. Then, if you get curious about something else, you can shift your attention there.

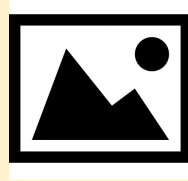


# Setting up your Journal Page

- Head your journal page with your metadata:
  - Date, day, time, season, location, temperature, wind, cloud cover.
- Find something that interests you.
- Plan your sketch or drawing in the middle of your page, leaving room around it.



# ABC'S, 123's,



- Begin your observations and record them:

- ABC's

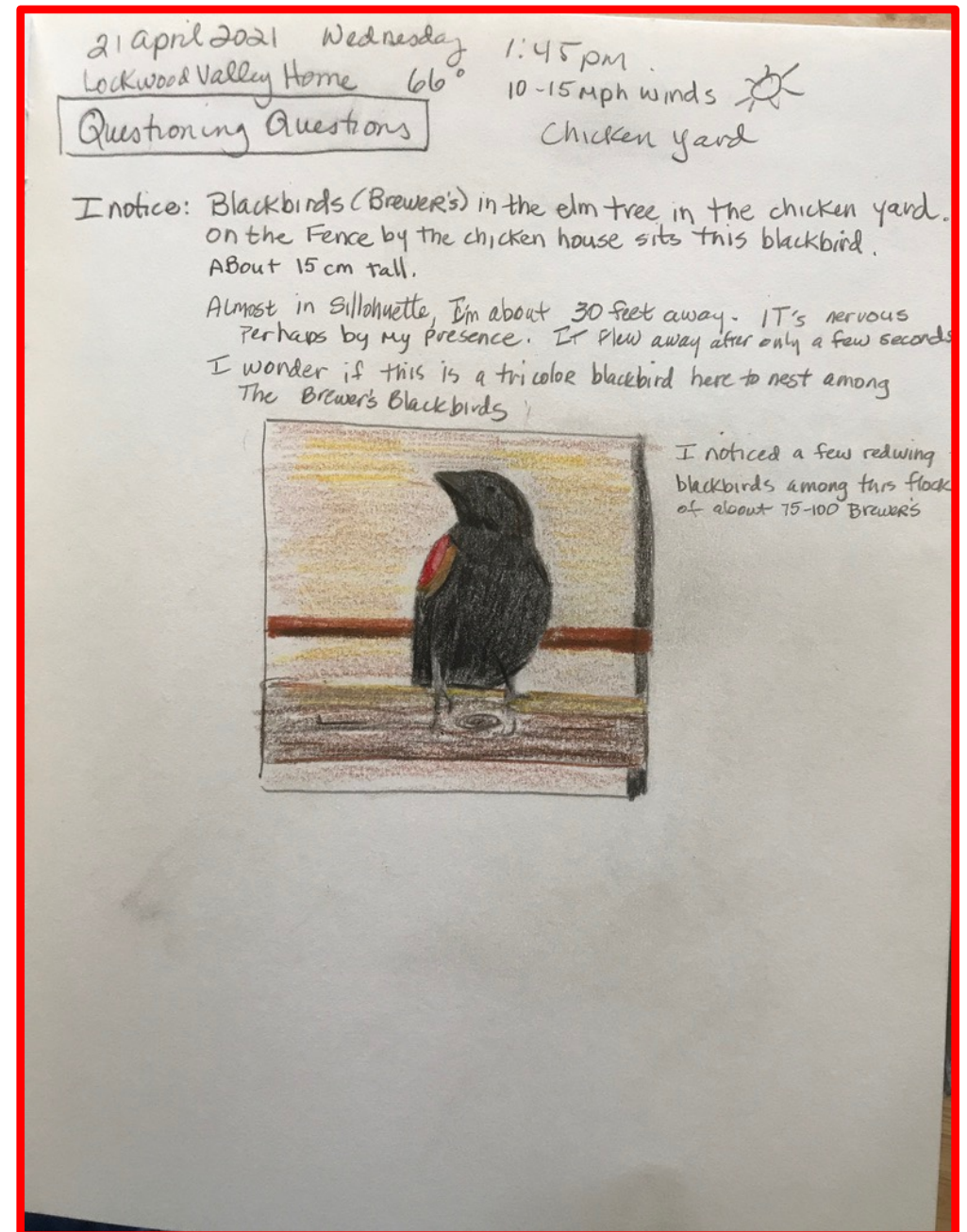
- I notice..., I wonder..., This reminds me of...

- 123's

- Measurements and metrics

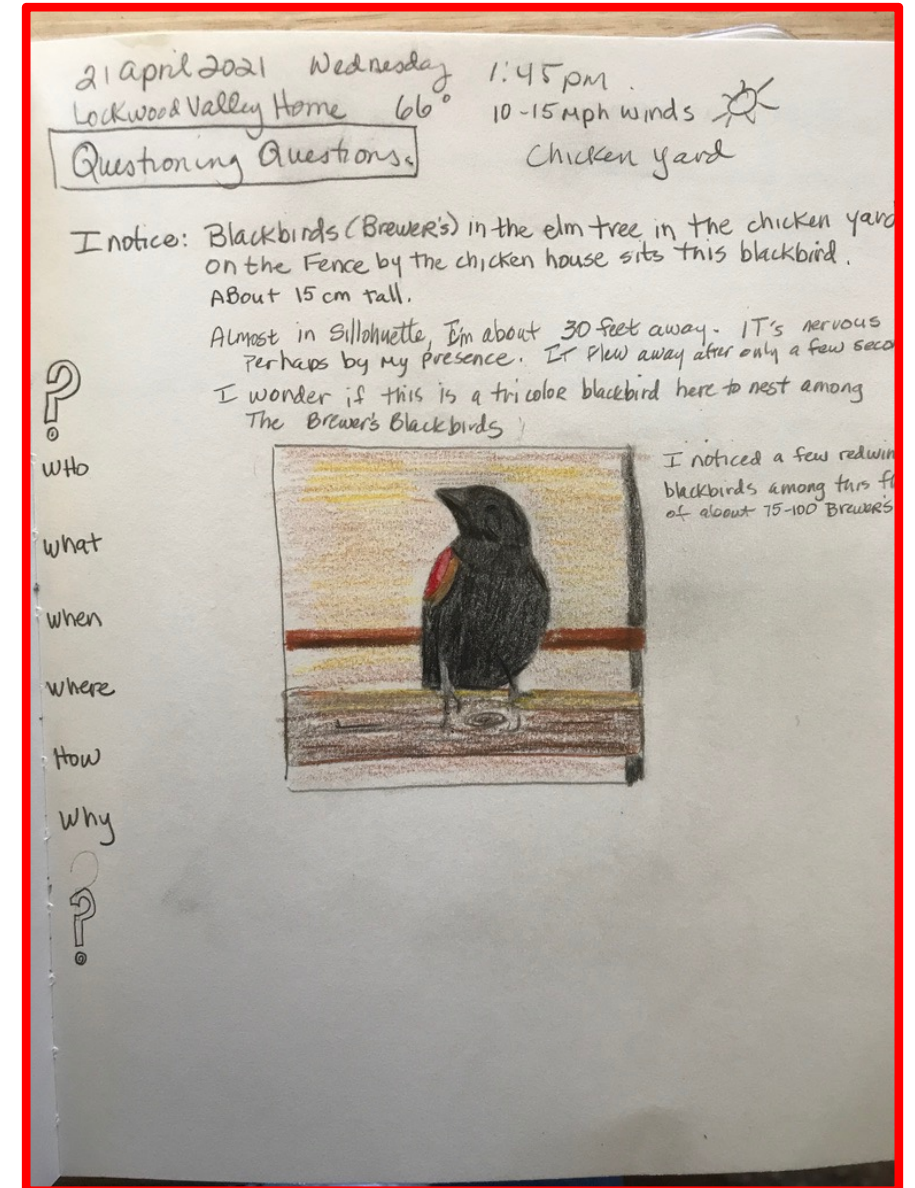
- Sketch, drawing or diagram

- Do this in the middle of your journal page.



# Ask Questions

- There are different tools to help generate questions.
- “Who, What, Where, When, How, and Why” is a **question generator** that can help us come up with lots of questions.
- Write “Who What Where When How Why” down the side of your page.
- Use these words to help you ask more varied and interesting questions.





What does  
each word  
mean?

- **WHO AND WHAT** questions can focus us on identifying things and describing a process.
- Use these words to ask questions to determine the kind of species or process we see.
  - “Who left these tracks?”
  - “What happened here?”

What does  
each word  
mean?

- **WHEN AND WHERE** questions get us thinking about space, location, and timing.
  - When things have happened or will happen,
  - Where things have happened or will happen,
  - or the significance of where things are in relation to one another.
    - “When did this sapling sprout?”
    - “Where did this seed come from?”

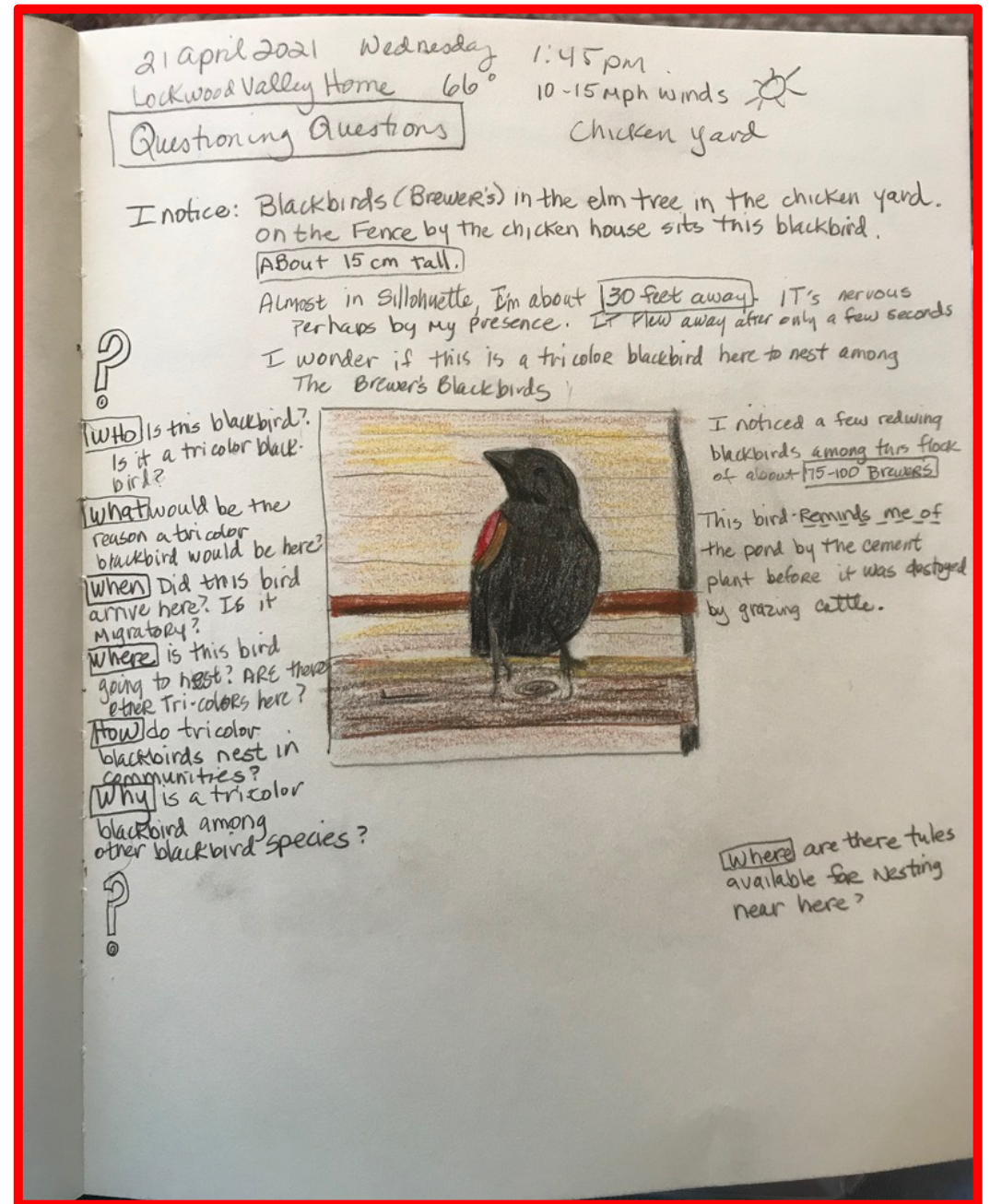
What does  
each word  
mean?

- **HOW AND WHY** questions focus on figuring out how things work or looking at cause and effect.
  - “Why are there holes on only one side of the leaf?”
  - “How do the spikes on the leaf help it survive?”



# USE THE QUESTION GENERATOR

- Try to come up with as many questions as possible.
- Start by asking questions about the subject you sketched. You can always shift your attention if your interest changes.
- If you are stuck and feel as though you can't come up with any more questions, you can just say "I wonder..." to yourself and see what pops out.





## The Goal is to ask Questions

- You don't need to be rigid with the words that start your questions.
- Don't worry about the first word of the question, the goal is to get the questions out there AND to have a variety of questions that focus on different ideas.
- Don't try to answer all the questions at the moment. Your goal is simply to be curious and get the questions out there.



# Remember the ***Language of Uncertainty?***

- Come up with some possible explanations for your questions.
- Use the LANGUAGE OF UNCERTAINTY when considering the possible answers:
  - **Maybe**
  - **Possibly**
  - **Perhaps**
  - **Could it be...**





# Explanations

- Include several explanations for each of your questions.
- You can draw lines from the question to your answers, or label the answers with "Who, What, Where, When, How, Why."

21 April 2021 Wednesday 1:45 pm  
Lockwood Valley Home 66° 10-15 mph winds ☀  
Chicken yard

**Questioning Questions**

I notice: Blackbirds (Brewer's) in the elm tree in the chicken yard. On the Fence by the chicken house sits this blackbird.  
About: 15 cm tall.

Almost in silhouette, I'm about 30 feet away. It's nervous perhaps by my presence. It flew away after only a few seconds. I wonder if this is a tricolor blackbird here to nest among the Brewer's Blackbirds.

**Who?** Is this blackbird? Is it a tricolor bird?


**What?** What would be the reason a tricolor blackbird would be here?

**When?** Did this bird arrive here? Is it migratory?

**Where?** Is this bird going to nest? Are there other Tri-colors here?

**How?** How do tricolor blackbirds nest in communities?

**Why?** Why is a tricolor blackbird among other blackbird species?



**TRI-COLOR BLACKBIRD**

I noticed a few redwing blackbirds among this flock of about 115-100 Brewers.

This bird Reminds me of the pond by the cement plant before it was destroyed by grazing cattle.

A second look on Thursday - yard full of blackbirds. I saw one fly past - flash of red - could have been tri-color or redwing blackbird. Too fast - couldn't see.

**LANGUAGE OF UNCERTAINTY**  
"MAYBE" "Possibly" "Perhaps"

**What?** Perhaps it is migrating or searching for a flock of other tri-colors. Maybe it's passing through and won't be here tomorrow.

**When?** Could it be this bird only arrived today or in the last week as the Brewers are pairing off and mating?

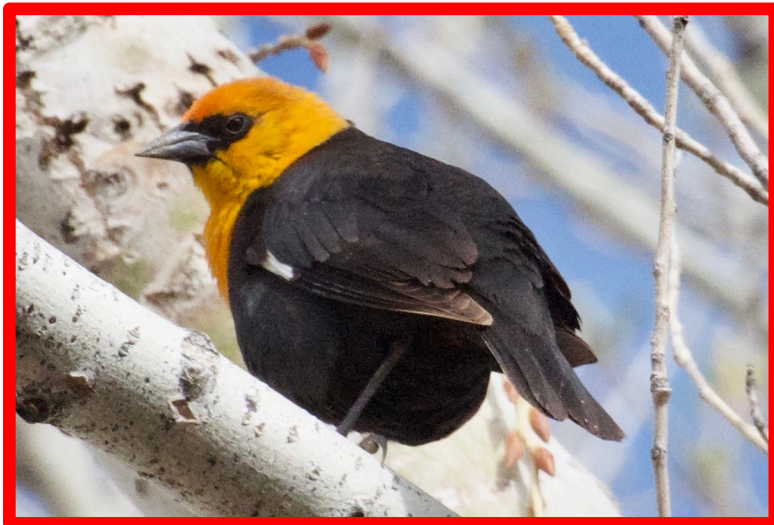
**Where?** Where are there tules available for nesting near here?

**How?** Possibly, tri-color blackbirds nest in marshes of oat tails or tules, close to each other. Perhaps they are not territorial.

**Why?** Maybe this bird is migrating and simply stopped by here because of the ponds in my yard.



**BYE FOR NOW. THANKS FOR JOINING ME**



YELLOW-HEADED BLACKBIRD