Observatory Night Chart

Player clue 1: Food | Team 1

Observers must choose a quiet garden shelter using the night chart and field records. We will use the records on the table to design the observatory moth shelter. Share the reading, explain each choice and keep the five results for the final plan.

Use only the fictional food-web rules printed here. Start with the food available now. A creature becomes available when its food rule is met. Find which named visitor can live here; a loop cannot create its own first food.

Fictional food-web rules

NIB needs LEAF

PEEP needs SEED

MOTH needs NIB OR PEEP

GLIM needs NIB AND PEEP

LOOP needs TWIN

TWIN needs LOOP

Starting conditions

Available now: SEED.

A result becomes available when its needs are met.

Which of MOTH, GLIM, LOOP becomes available?

Food result: _____

Observatory Night Chart

Player clue 2: Habitat | Team 1

These are fictional field cards for a paper model. Compare all the recorded conditions with the habitat requirements. A card that passes only one rule is not enough. Report the one card that meets every rule.

Fictional field cards

FERN: light=shade; floor=dry; entry=wide

MOSS: light=sun; floor=damp; entry=narrow

REED: light=shade; floor=damp; entry=wide

Required features

light must be shade.

floor must be damp.

Report the one matching card ID.

Habitat result: _____

Observatory Night Chart

Player clue 3: Keeper | Team 1

Keeper desk: Each person has ONE different item. Use all four NOT rules. Find Rigel's item and copy its digit.

Scope digit 3	**Chart** digit 6	**Pen** digit 9

People: Vega, Rigel, Deneb

Vega does NOT have Pen.

Rigel does NOT have Scope.

Rigel does NOT have Chart.

Deneb does NOT have Scope.

Find Rigel's item. Each item is used once.

Keeper result: _____

Observatory Night Chart

Player clue 4: Read | Team 1

Read desk: Combine every BEFORE rule to order the four actions. Write positions on the whole-sheet cards. Read position 4.

Set scope [8]	**Record sky [2]**
Read chart [0]	**Open roof [6]**

Open roof BEFORE Read chart

Set scope BEFORE Record sky

Read chart BEFORE Record sky

Open roof BEFORE Set scope

Set scope BEFORE Read chart

Read position 4 (positions start at 1).

Read result: _____

Observatory Night Chart

Player clue 5: Point | Team 1

Point desk: Start at S. Follow EVERY arrow one square, including revisited cells. Record only the endpoint digit.

S: 7	**9**	**1**	**3**
0	**2**	**4**	**6**
3	**5**	**7**	**9**

right > down > right > up > right > down > down

One arrow = one square. S = start.

Point result: _____

Observatory Night Chart

Player clue 6: Final | Team 1

Recover one requirement for each habitat layer from its named result. Choose a matching roof, floor, water source, food and entry. Write the five part IDs in the printed layer order, then point to the evidence supporting each choice.

Use your results from: Food, Habitat, Keeper, Read, Point.

Habitat construction key
Roof (Food): GLIM=shade; MOTH=sun
Floor (Habitat): REED=dry; FERN=damp
Water (Keeper): 3=still; 9=flow
Food (Read): 2=leaf; 8=seed
Entry (Point): 7=wide; 9=narrow
Parts (one per layer, top to bottom)
Roof: R2=sun; R1=shade
Floor: F1=dry; F2=damp
Water: W2=flow; W1=still
Food: D1=leaf; D2=seed
Entry: E2=narrow; E1=wide
Build rule
Choose each part meeting its recovered requirement.
Report five part IDs top to bottom, with hyphens.

Final result: _____

Ask your host to check your final result and read the ending.