Project Meeting





a-MAZE-ing pets

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TIME

60 - 90 minutes

COST

\$ - \$\$

SKILLS GAINED

Observation
Behavior Analysis
Critical Thinking
Hands-On Construction
Scientific Inquiry &
Experimentation
Responsibility
Patience
Communication

Reflection

INTRODUCTION

In this hands-on lesson, youth will explore the importance of enrichment for small animals by designing and building custom mazes for their hamsters or guinea pigs. Youth will learn how mazes encourage natural behaviors like foraging, burrowing, and exploring, helping to keep their pets mentally and physically stimulated.

After sketching and constructing their mazes using materials like cardboard and paper towel rolls, youth will guide their pets through the courses, observing how they navigate obstacles and problem-solve. Through this activity, participants will gain a deeper understanding of animal behavior, recognizing the differences in how species like hamsters and guinea pigs interact with their environments. They'll track their pets' progress, discuss their observations, and reflect on how enrichment activities can improve animal well-being. This lesson not only promotes responsible pet care but also encourages creativity and critical thinking as youth adjust and improve their maze designs.

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Lesson Plan Information

OBJECTIVE

By the end of this lesson, youth will be able to:

- Understand the importance of enrichment for small animals.
- Identify natural behaviors in hamsters and guinea pigs (like burrowing, foraging, and exploring).
- Design and build a maze that encourages these natural behaviors.
- Observe and document their pet's problemsolving abilities and behavioral responses.

MAZE BUILDING SUPPLIES:

- Cardboard boxes, paper towel rolls/toilet paper rolls
- Popsicle Sticks
- Glue (Non-Toxic)
- Tape
- Decorations (markers, construction paper)
- Stopwatches or Timers
- Graph Paper (for maze design)
- Maze Observation Sheets (print from this lesson plan)

YOUTH SHOULD BRING:

- This is an animal participation lesson, please encourage youth to bring their pocket pets!
- Also, their pets favorite treats.

BEFORE YOU GET STARTED:

Hamsters and guinea pigs are curious, active animals that love to explore their surroundings. In the wild, hamsters spend a lot of time burrowing underground to create tunnels where they sleep, store food, and stay safe from predators. They're also natural foragers, which means they search for food in their environment, using their sharp sense of smell and whiskers to guide them. Guinea pigs, on the other hand, are ground-dwelling animals that love to explore open spaces and nibble on plants as they graze. While they don't burrow like hamsters, they do enjoy hiding in tunnels or shelters to feel safe.

Both of these animals need more than just food and water to stay happy and healthy. They need mental stimulation —activities that challenge their brains and physical exercise to keep their bodies active. Without fun things to do, like exploring new spaces or solving little challenges, they can get bored, stressed, or even unhealthy. That's where a maze comes in! Mazes help recreate the fun of burrowing and foraging, encouraging your pet to use its natural instincts to explore and find treats. Plus, watching how your pet solves the maze is a great way to learn more about its unique personality and behavior!

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Lesson Plan Information

INTRODUCTIONS

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Why Enrichment Matters:

Explain how mazes mimic natural behaviors like foraging and exploring tunnels. Share that mental stimulation keeps pocket pets healthy and happy!

Behavioral Patterns:

Discuss how hamsters (nocturnal, burrowers) might navigate differently from guinea pigs (social, grounddwellers).

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MAZE DESIGN CHALLENGE

Planning the Maze:

Have youth sketch their maze on graph paper first. Encourage creativity—adding dead ends, tunnels, and hiding spots!

Design Considerations:

Keep maze walls high enough (hamsters love to climb out!). Ensure guinea pigs have wide pathways (they're larger and less flexible than hamsters). Add windows or clear walls for

better viewing.

BUILDING THE MAZE



Provide time for kids to construct their mazes using cardboard, rolls, and other materials. They can decorate them with non-toxic markers.

MAZE TIME!



Place a treat at the end of the maze and time how long it takes for each pet to reach it.

Observation Focus:

- Do they hesitate at certain points?
- Do they explore methodically or randomly?
- Are they motivated by food or just curious?



DISCUSSION & REFLECTION

Compare Results, make or discuss adjustments to the maze, and take the mazes home to use with their pets!

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Take it Further

PET OLYMPICS



Host a fun, friendly competition where participants time their pets through the mazes and award small prizes for categories like "Fastest Navigator" or "Best Explorer."

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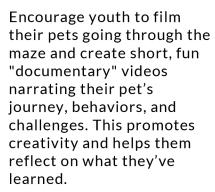
SCIENTIFIC TWIST

Turn the maze into an experiment - adjust one variable at a time (such as maze complexity or treats used and record the changes in behavior.

SPECIES SHOWDOWN

If multiple species are present (hamsters, guinea pigs, or even mice), compare how each navigates the same maze. Discuss how body shape, natural behaviors, and instincts affect how they approach the challenge.

VIDEO CREATION



OBSTACLE COURSE

Add jumps or tunnels to create an obstacle course to add an element of exercise and add difficulty to the maze.

DESIGN CONTEST

Host a contest where participants compete for categories like Most Creative Maze, Best Use of Materials, or Most Challenging Maze. Let the group vote or have a panel of judges evaluate the designs based on creativity and functionality.





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Discussion Topics/ Check for Understanding

Juniors

- What did your pet do when you first put them in the maze?
- Did your hamster or guinea pig find the treat quickly, or did they get stuck?
- What part of the maze was the hardest for your pet?
- What do you think your pet liked most about the maze?
- If you made another maze, what would you change to make it more fun for your pet?

Intermediates

- What natural behaviors (like burrowing or foraging) did you see in your pet while they explored the maze?
- How did your pet's behavior change when they found a dead end or got confused?
- Was your maze too easy, too hard, or just right? How can you tell?
- If you could add one new feature to your maze, what would it be and why?
- How do you think activities like this maze help keep your pet healthy and happy?

Seniors

- How did your pet's problem-solving skills show through in the maze? Did they learn or improve with multiple tries?
- How might a hamster's burrowing instincts make them better at mazes compared to a guinea pig's natural behaviors?
- What changes would you make to increase the difficulty of your maze while still keeping it fun and safe for your pet?
- Why is mental stimulation important for small animals like hamsters and guinea pigs? Can lack of it cause health issues?
- If you were to design an experiment using mazes to study animal behavior, what variable would you test (e.g., maze complexity, reward type)?

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Ideas & Evaluation

Project Ideas

Scan this QR code to submit your project lesson plan idea





Evaluations

If you are an adult involved in this lesson, please scan the QR code below



If you are a youth involved in this lesson, please scan the QR code below

