

Think of all the things that your dog would naturally choose to do in their daily routine: things like sniffing, eating snacks, chasing birds, tearing up toys, and more! All of these activities (called "high-probability" behaviors) can be used to reinforce the behavior that you would prefer your dog to offer (currently "low-probability" behaviors) during your adventures together. This is called the "Premack Principle" after psychologist Dr. David Premack who pioneered this extension of behavior research.

WHAT IS THE PREMACK PRINCIPLE?

- **Definition:** For any pair of behavioral responses, the more probable behavior will reinforce the less probable behavior. When employing the principle, you are looking at two behaviors and comparing the likelihood of each of those to occur. The more probable behavior reinforces the less probable.
- **Example Application:** Your dog loves to sniff in the park. This is the high-probability behavior! You want your dog to walk on a loose leash beside you. This is the low-probability behavior. We can use the opportunity to engage in sniffing to reinforce loose leash walking.



REINFORCERS VS. DISTRACTORS

- List 5 Reinforcers (things you think you can use to reinforce your dog's good behavior).
 - Next, list 5 Distractors (things that make it hard for your dog to do the good behavior).
 - Turns out - those Distractors can usually also function as Reinforcers! So, now you have a list of 10 things you could potentially use to reinforce your dog's good behavior!
 - Instead of fighting against the Distractors, we can harness them to our advantage.
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Reinforcement: "Something that follows an action and makes that act more likely in the future." (Sidman, Coercion & Its Fallout, 2001)

THINGS TO REMEMBER ABOUT REINFORCEMENT

- Reinforcement is anything that increases the likelihood that the behavior will happen again in the future.
- The individual learner decides what is reinforcing.
- The effectiveness of a particular reinforcer can vary over time for an individual learner. It can also vary depending on the environment (inside vs. outside?) or the behavior you are trying to reinforce.
- It's not the "thing" itself that is reinforcing – it is the action associated with it. It's not the toy, it's the opportunity to play with the toy. It's not the treat, it's the opportunity to eat the treat.

THE REINFORCER VALUE TO THE LEARNER IS
CONSTANTLY EVOLVING BASED ON THE ENVIRONMENT
THAT THE ANIMAL IS IN.



Watching cows is a high-probability behavior for this learner! This activity can be used to reinforce low-probability behaviors like a recall or focus skill. Watching cows is potentially more palatable as a reinforcer in this environment than eating a food treat would be.

Pavlov + Skinner = Premack (Killeen, 2014)

Click here for a great scientific overview article on how Pavlovian Conditioning and Skinnerian Conditioning come together in the Premack Principle. Understanding the science helps us relate better to our dogs!

Alternative Definition of Reinforcement: Reinforcement is any behavior more probable than the one you're training.

PRACTICAL CONSIDERATIONS FOR PREMACK

- **Control Access:** In order to effectively use an activity as a reinforcer for a different behavior, you have to be able to control the access to that preferred activity until *after* you see an offering of the behavior you want to be able to reinforce. See Page 4-6 for practical examples of this.
- **Ethics:** We must consider the ethics of our dog's high-probability behaviors before utilizing them as reinforcers. High-probability behaviors such as "kill cats", "bite people," or even more mildly "run up to that unsuspecting on-leash dog to say hello" are not ethical options to use as reinforcers.
- **Safety:** Before using a preferred activity as a Premack reinforcer, consider the set up to make sure it is set up for optimal safety. See Page 4-6 for practical examples of this.
- **Rate of Reinforcement:** This will go down significantly at first. Premack isn't as fast as food reinforcers, because the animal is going to take a bit of time to do the preferred activity, especially early on in your training plan. So add a little bit of patience into your training plan!
- **Clear Release Cue:** Make sure you have a word or other signal that your dog clearly understands to mean "Now I get to have that!"
- **Dynamic Nature:** Remember, reinforcement changes depending on the learner and the specific environment. Not every activity will be reinforcing to your dog in all contexts, and that's ok. The Premack Principle is all about utilizing the contextual reinforcers to maximize our training effectiveness.



VIDEO: [Premack Applied - Real-Life Rewards](#)

Alternative Definition of Reinforcement: Reinforcement is facilitating access to a preferred activity.

PREMACK SET UP EXAMPLE #1

These are just a few examples on the applications of the Premack Principle. We'll use Roo, Summit Head Trainer Amber's adventure partner, as the dog in these examples:

- **Sniff the Snow-Covered Ground:** The high-probability (HP) behavior for Roo when there are snow piles all around our normal walking path is sniffing the delicious smells every few feet. The low-probability (LP) behavior is walking with Amber past the smells at a "normal" walking pace. First, Control Access: Amber walks in the middle of the street or sidewalk the furthest distance from the snow piles & shortens the slack in the leash slightly. Second, look for LP behavior in small dose. Roo looks at Amber and walks on a loose leash for a few steps. Amber gives release cue "Ok! Get it!" and takes Roo to sniff the snow, pausing for as long as Roo needs to absorb the smell. When he disengages, Amber calls away and they repeat again. After a few repetitions, Roo is staying engaged longer between each sniff break and Amber no longer needs to use the Control Access strategies as they are walking together.



Playing in the snow was one of Roo's lifetime high-value reinforcers. The opportunity to go sniff and run in the snow was a powerful reinforcer used to create his rockstar leash walking and recall behaviors.

Alternative Definition of Reinforcement: Reinforcement is facilitating access to a preferred activity.

PREMACK SET UP EXAMPLE # 2

- **Chase the Squirrels:** In this example, the HP behavior is Roo running after the squirrels in the park. The LP behavior is Roo giving eye contact to Amber in the presence of squirrels. Control Access & Safety Considerations: In addition to the Control Access strategies in Example #1, Safety in this set up looks like choosing squirrels to chase that are already close to a tree (not going to escalate very far, run into a road, etc.), and being prepared to run with Roo towards the squirrels or utilize a long-line for him to chase more independently. When Roo sees a squirrel, Amber waits for Roo to check in with her. (At first, for a dog that's new at this, this check in will likely be very brief!) After the check-in, Amber gives the release cue "Ok! Get it!" and runs with Roo towards the squirrel and they send it up the tree. They repeat this, increasing the criteria gradually from a check-in glance to a loose leash walk past the squirrel.

Ethics Note: In Premack set-ups involving other animals, it is important to consider the health and safety of the other animals involved. For squirrel set ups, the squirrels always have an easy escape route and seem resilient to these encounters. Other animals (rabbits, horses, cats, livestock, etc.) would likely respond differently and so wouldn't be comfortable participants of Premack set-ups such as this.

Even though Roo maintained his interest in investigating prey animals throughout his life, because of his work with the Premack Principle, he was able to walk past and recall away from exciting animals easily! Squirrels in the park turned into a cue to check-in with Amber rather than going crazily towards them! Usually he was rewarded with praise, occasionally with a treat, and sometimes on rare occasions with the magic release cue that meant he could go chase the squirrel up the tree!



Alternative Definition of Reinforcement: Reinforcement is facilitating access to a preferred activity.

PREMACK SET UP EXAMPLE #3

- **Urinating on Things:** One of the highest probability behaviors for Roo enjoying any outdoor activity is urinating on everything he can! A significantly lower probability behavior is walking past pee opportunities on a loose leash. First, Control Access: Similar to the sniffing in the snow management, managing proximity to opportunities to urinate involves walking a distance away from the grass and/or maintaining a slightly shorter leash. Second, look for LP behavior in small dose. Roo looks at Amber and walks on a loose leash for a few steps. Amber gives release cue "Ok! Get pee!" and takes Roo over to a desirable urination spot, pausing for as long as Roo needs to eliminate. When he finishes, Amber calls away and they walk on. As Amber sees more great leash walking behavior, she delivers the release cue again and cues another pee break. After a few repetitions, Roo is staying engaged longer between each pee break and Amber no longer needs to use the Control Access strategies as they are walking together.
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APPLICATION

You can apply the Premack Principle to you and your dog's specific situation in a variety of ways! Just remember the underlying concept that just about anything that is more likely than your desired behavior can be used as a reward and reinforcer for your desired behavior!

As far as getting your desired behavior, remember to raise your criteria gradually, reinforce liberally, and manage your environment and control access to the reinforcing activity to the best of your ability.

