



Ratio, Interval, and Duration Reward Schedules for Puppy Behaviors

When you can successfully command your puppy into a position or behavior without using a lure about 80% of the time, you can begin to reduce the frequency of giving food rewards. So far you have used a continuous-ratio reward schedule which means you've rewarded the pup for every repetition of the behavior. I want you to keep using a continuous-ratio reward schedule with verbal and/or physical praise, meaning that you will love up the dog every time he does what you ask. However, we are going to work to start reducing the ratio of your food rewards.

A variable reward schedule makes a reward event unpredictable for the puppy, so that he performs each repetition with enthusiasm, hoping to attain a reward. But how often should you reward the pup in your variable reward schedule? This is where the 80/20 Rule comes into play. I want you to shoot for *average* reward ratios which approximate the progression established by the 80/20 Rule, reducing the rate by 20% **ONLY WHEN** the pup is successfully performing the behavior 80% of the time at the previous rate. When in doubt, **REWARD THE PUP**. You should be developing a feel for when your pup needs a reward and when he can do without.

Occasionally we will also return to a fixed-ratio reward schedule, to help the pup bridge the gap between ratios when we ask him to work for significantly longer without a reward. The 100%, 50%, and 25% steps in the progression are where we will revert to a fixed-ratio reward schedule.

Since we've started with a continuous reward schedule, the next step is to reward the pup only 80% of the time. I like to keep track of repetitions in sets of 5 in my head, which makes the 80/20 Rule very easy to follow if you remember the following progression:

- A reward is offered every repetition;
- A reward is offered on average in 4/5 repetitions;
- A reward is offered on average in 3/5 repetitions;
- A reward is offered every other repetition;
- A reward is offered on average in 2/5 repetitions;
- A reward is offered on the first and last of 5 repetitions;
- A reward is offered on average in 1/5 repetitions.

It's very important to use your terminal reward marker (TRM) **ONLY WHEN** you're rewarding with food. Keeping your TRM fresh like this preserves it for shaping other behaviors in the future. **If you say it, you pay it!** All other repetitions, use genuine Words of Approval and physical praise to get your pup working for YOU, not the bait.

Help your pup along by using the following body-language cues he's been conditioned to watch for:

- SIT
 - Raise your closed fist, palm down, backwards and over the pup's head.
- DOWN
 - Close your fist and point your index finger. Lower this past the pup's head and point your finger on the ground a few inches past his front feet. You can continue to use your other hand to provide gentle guiding pressure on his shoulders but work to fade out this contextual prompt.

- **HEEL**
 - Pat your left leg right next to the pup's head as you move along. Over time, you can raise your hand higher along your leg. Ultimately, we are aiming for you to have your left hand planted on your belly-button, but don't move it higher if your pup is starting to forge ahead.
- **KENNEL and CAST**
 - From a couple feet away, point to your platform and say, "Joe, kennel!" Use your right hand to gesture to platforms to your right and your left hand to gesture to platforms to your left.
 - You can start to use multiple platforms spaced about 5 feet apart to CAST the dog back and forth for multiple repetitions.
 - If you have access to a Treat and Train, now would be the time to start using it. Place the T&T about 10 feet past your platforms. Now when your pup climbs onto the correct platform, hit the Reward button on the T&T remote, causing your pup to run out away from you to get his reward. When he turns back to look at you, CAST him to one of the platforms and repeat.
 - You can achieve the same effect with a helper armed with a clicker and a handful of bait sitting where the T&T would be. Just make sure you charge the clicker ahead of time and work out some sort of signal with your helper to indicate when she should activate the clicker and feed the pup.

Interval Rewards

Interval reward schedules specify the length of time between when rewards are available, as opposed to the frequency of repetitions specified in ratio schedules.

KENNEL is the natural choice to start working with an interval schedule. Send your pup to his platform and crouch down next to it to give him a TRM when all 4 feet are up, holding the bait somewhere he can only access from the platform. It doesn't matter what position he's in. When he finishes swallowing, give him another TRM. Then another. Continue on rewarding like this for 5 repetitions, remembering to **only hold the bait somewhere he can access from the platform**, then lead the puppy off the platform.

Round 2, we're going to work it the same way, but now we're aiming for an average interval reward schedule of 4 rewards in 5 intervals (*remember that it takes the puppy a few seconds to chew and swallow the bait*). That means that, for one of the intervals, you're going to wait for 2 seconds before giving a TRM.

Once again, we will follow the progression set out by the 80/20 Rule, using both fixed and variable schedules.

- A reward is available constantly;
- A reward is available on average in 4/5 1-second intervals;
- A reward is available on average in 3/5 1-second intervals;
- A reward is available every other 1-second interval;
- A reward is available on average in 2/5 1-second intervals;
- A reward is available on the first and last of 5 1-second intervals;
- A reward is available on average in 1/5 1-second intervals.

Tip: As the length of your intervals increases, use Words of Encouragement only while the puppy is on the platform to let him know he's on the right track but do not give your TRM unless you're delivering a food reward. **If you say it, you pay it!** If at any point your puppy climbs off the platform, your TRM and the fact that you only hold the bait somewhere he can access it from the platform will bring him back.

You should be able to progress to 5-10 seconds between reward-intervals very quickly. You may even be able to work this in one single session.

Duration Rewards

When your pup has 5-10 seconds between reward intervals on his platform in the bag, it's time to start increasing duration on the SIT, DOWN, and WHOA exercises. A duration reward schedule specifies the amount of time the pup must remain in the position before a reward is offered.

Start with SIT. Since he can easily work a 1/5 interval schedule on his platform, we'll start with 4-second durations. Command him to SIT, and when he finds the position, begin giving him Words of Encouragement. Count to 4 in your head, then give a TRM. It doesn't matter if he breaks position when you give his TRM. If he breaks before you get to 4, help him find the position again and re-start the clock.

If he'll hold SIT for 4 seconds in 4/5 repetitions, increase to 5 seconds. Then 6. Following the 80/20 Rule:

Work until you get:

- 4/5 reps of 4-second durations;
- 4/5 reps of 5-second durations;
- 4/5 reps of 6-second durations;
- 4/5 reps of 7-second durations;
- 4/5 reps of 8-second durations;
- 4/5 reps of 10-second durations.

When you get to 10-second durations, you can start fading your Words of Encouragement along the same interval schedule you used for KENNEL. So:

Speaking Words of Encouragement:

- Constantly
- 8/10 Seconds
- 6/10 Seconds
- About half the time
- 4/10 Seconds
- For the 1st and last of 10 seconds
- One "Good boy," halfway through the 10 seconds

Be careful not to use your TRM until your pup has made it all the way through the duration. **If you say it, you pay it!**

When your pup can easily hold SIT for 10 seconds, follow the same process for DOWN and WHOA as well.