Strengthening Exercises for Above Knee Amputation

Do the exercises slowly with smooth motions to avoid injury. Be sure to keep breathing while you exercise. Do not hold your breath because it could cause your blood pressure to rise.

Only do the exercises checked by your therapist.

Do each marked exercise ____ times each (repetitions) ____ times per day (sets).

- **Gluteal Sets**
  - Squeeze your buttocks together.
  - Hold for 5 seconds and release.

- **Hip Adduction with Towel Roll**
  - Lie on your back. Place a rolled towel or pillow between your unaffected leg and residual limb as low as feels comfortable.
  - Squeeze the towel while you count to 5.
  - Relax and repeat.

- **Pelvic Tilt**
  - Lie on your back. Bend your knee, so the foot of your unaffected leg is resting flat on the floor.
  - Place your hands in the small of your back.
  - Push your lower back into your hands. Hold as you count to 5.
  - Relax and repeat.
- **Abdominal Bracing**
  - Lie on the floor and inhale with your lower back flat against the floor.
  - Exhale and gently pull in your abdominal muscles. Keep your neck and shoulders relaxed. Do not bear down or forcefully suck in your abdomen.
  - Inhale and relax.

- **Hip Flexion**
  - Lie on your back.
  - Lift up your residual limb to point at the ceiling as much as possible.
  - Return to lying flat.
  - Relax and repeat.

- **Hip Out and In (Adduction)**
  - Lie on your back.
  - Move your residual limb out to the side and back in.
  - Relax and repeat.

- **Hip Abduction on Side**
  - Lie on your side and lift your top leg toward the ceiling. Do not turn your knee up toward the ceiling.
  - Return to the starting position.
  - Repeat.
  - Do this same exercise with your other leg on top.
- **Hip Extension on Side**
  - Lie on your side.
  - Push your residual limb straight back behind you.
  - Hold and then return to the starting position.
  - Repeat.

- **Hip Extension on Stomach**
  - Lie on your stomach.
  - Lift your residual limb toward the ceiling.
  - Hold and then return to the starting position.
  - Repeat.

- **Bridges**
  - Lie on your back with a towel rolled towel under your residual limb.
  - With your unaffected leg, bend your knee, so that your foot is resting flat on the floor.
  - Tighten the muscles in your residual limb and push down into the towel.
  - Lift your buttocks up while keeping your stomach muscles tight.
  - Hold for ____ seconds and then relax.
  - Repeat.

- **Resisted Hip Abduction (with Theraband)**
  - Lie on your back and fasten a belt or theraband around your thighs as low as feels comfortable.
  - Try to pull your legs apart by pushing outward against the belt or theraband.
  - Push as you count to 5.
  - Relax and repeat.
Alternative Hip Adduction
- Lie on your side with your unaffected leg on top.
- Bring your top leg forward and let your foot rest on the floor in front of you.
- Lift your residual limb toward the ceiling and back down.
- Repeat.

Partial Sit-up
- Lie on your back.
- Bend your hips, so the foot of your unaffected leg is resting flat on the floor. Rest your hands on your thighs.
- Slowly curl up until your head and shoulder blades are off the floor.
- Look up to the ceiling as you do this exercise.
- Repeat.

Knee Up Abdominal Crunches
- Lie on your back on a pad or mat with your knee bent and foot flat on the floor. Put your arms at your sides.
- Lift your foot, head, and hands off the floor, while you tighten your stomach muscles and flatten your lower back to the floor.
- Pump your arms up and down slightly.
- Slowly return to the start position.
- Relax and repeat.
- **Hip Extension on Hands and Knee**
  - Kneel down on a mat or pad to cushion your knee. Place a pillow under your foot and lower leg.
  - Balance yourself on your hands and knee.
  - Slowly lift your residual limb out behind you. Control the motions and lighten your buttock muscles as you lift. Keep your hips and back still and level to the ground.
  - Hold. Slowly return to the starting position.
  - Repeat.

- **Leg to Side (Quadruped Hip Abduction)**
  - Kneel down on a mat or pad to cushion your knee.
  - Balance yourself on your hands and knee.
  - Slowly lift your residual limb out to the side. Control the motions and lighten your buttock muscles as you lift. Keep your hips and back still and level to the ground.
  - Hold. Slowly return to the starting position.
  - Repeat.