The model horse made from this pattern is an excellent training aid for 4-H project leaders, vocational instructors, and classroom teachers. It does not object to repeated examinations, injections, inspections of teeth and feet, or awkward handling. It does not even require stabling and trailering services.

Here are examples of horse project skills which 4-H’ers can successfully demonstrate while using the model horse as an aid for project meetings, skillathons, and project bowls:

- Identifying Breeds
- Identifying Parts
- Recognizing Strengths and Faults
- Selecting Criteria
- Judging
- Castrating
- Paste Worming
- Caring for Newborns
- Taking Temperature
- Controlling External Parasites
- Administering Medication
- Tattooing
- Fitting and Showing
- Making a Rope Halter
- Tacking
- Bandaging
- Determining Weight
- Grooming
- Trimming Hooves
- Estimating Age by Teeth
- Floating Teeth
- Treating Scours
- Treating Thrush
- Diagnosing Colic

This pattern serves as an important training aid for the six guides in the National 4-H Curriculum House Series.

Horse 1 .................................................. Stock # 08053
Horse 2 ............................................................. 08054
Horse 3 ............................................................. 08055
Horse 4 ............................................................. 08056
Horse 5 ............................................................. 08057
Helper’s Guide ................................................. 08168

Find more about these and other National 4-H Curriculum at: www.4-hcurriculum.org

The model horse can also help 4-H’ers develop life skills as well as project skills. Use of the model horse frees leaders and members from maintaining the safety precautions which are necessary when working with live animals. Both leaders and members can become involved with the 4-H idea of learning by doing. Important life skills such as these may be enhanced as a result:

- Applying Knowledge
- Facilitating Group Efforts
- Self Expression
- Teamwork
- Sharing
- Problem Solving
- Desire to Provide Quality Care for Animals
- Questioning
- Risk Taking
- Relating to Others
- Thrill of Learning
- Decision-making
- Justifying Decisions
- Developing Leadership Skills

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Using the Model Horse to Learn

Ideas for Using the Model Horse for Teaching

The 4-H Program is built on the principle of allowing the members to learn by doing before being told or shown how. This experiential approach allows the members to maximize the opportunity to develop important life skills previously mentioned which contribute to a healthy self-esteem. The approach also helps the members think about what they are doing and personally identify with the activity rather than being a passive observer. The experiential learning process successfully used to involve the members in this type of activity is shown here.

How to Teach With This Model

The 4-H program is founded on the principle that members learn by doing. Participants explore on their own before receiving instructions from others as frames of reference. Members benefit from such personal and meaningful learning experiences. When used with the experiential learning model shown below, the model horse can have a strong impact on the experience. This model shows that learners are given opportunities to discover their own solutions. Questions and discussions help broaden and clarify their understanding. Instead of imposing their answers directly on the group, facilitators help participants build on their presentations by asking thought provoking questions which may lead to greater understanding.

Moving from “leader centered” to “member centered” learning situations is very important. You can do this by inventing realistic situations which require members to perform tasks to which they can relate. This allows learners to assume ownership of the activities. Here is an example:

Situation: A neighbor asks you to worm her horse.

Task: Demonstrate how to paste worm a horse.

4-H leaders who use this technique discover that members not only enjoy discovering solutions, but develop important life skills in the process.

Youth share how they will use the project and life skill practiced in other parts of their lives.

Youth describe the experience and their reaction.

Youth discuss what was most important about what they did.

Youth relate the project and life skill practiced to their own everyday experiences.

Youth do before being told or shown how.

Youth do after discovering solutions.

Youth participate in the process by discussing, analyzing, reflecting and evaluating.

Youth generalize to connect the experience to real-world examples.

Youth apply what was learned to a similar or different situation: practice.

Youth share the results, reactions, observations publicly.

Youth share with others how they will use the project and life skill practiced in other parts of their lives.

Conducting a Horse Skillathon

A skillathon is a test of skill in which a series of learning stations present situations and assign tasks to learning teams. The 4-H skillathon extensively uses model animals in conjunction with the experiential learning mode. Teams are supplied with necessary learning aids and supplies. A facilitator at each station allows teams to demonstrate solutions to an assigned task, then follows up with questions. Teams spend from five to ten minutes at each station, depending on both the number of teams and stations and the complexity of the tasks. Even after 15-20 teams demonstrate how to administer paste wormer to the model horse, it is still ready for the next group.
Getting Started

Materials Needed

- 1-3/4 yards (60 inches wide) imitation suede or upholstery fabric—should be firm, but have some stretchiness
- one spool matching thread
- two craft squares (9 x 12 inch) matching felt for muzzle, chin, ear linings and penis
- 3 inch square of matching hard cellulose sponge for chestnuts
- 15 x 7 inch piece of fusible interfacing for mane and tail
- 14 inch square of cotton or muslin for lining storage cavity
- 8 inch long zipper for storage cavity
- 8 x 10 inch piece of black, flannel-lined vinyl for hooves
- 8 x 8 inch piece of tan vinyl for soles
- 9 x 12 inch light pink felt craft square for mouth lining and nostrils
- 8 x 8 inch piece of dark pink or red felt for tongue
- 5 x 5 inch piece of tan felt for frogs of feet
- two large craft eyes
- 15 inch long piece of 1/2 inch wide velcro for chestnuts, scrotum and mouth
- 10 x 10 inch piece of aluminum tooling foil for horseshoes
- one skein of yarn for mane and tail
- one 10-pound bag of polyester fiberfill
- two marbles or large beads for testes
- two 6 inch diameter disposable plastic plates for teeth
- 6 x 6 inch piece of cardboard from cereal box for insoles
- 16 inch length of 3/4 inch wide plastic tubing for esophagus
- 10 inch length of 1/4 inch wide plastic tubing for rectum
- 12 feet of 1/2 inch wide leather or cotton braid for halter
- two buckles (1/2 inch wide) for halter
- one round harness ring (1-1/2 inch diameter) for halter
- four square harness rings (1 inch wide) for halter
- rivets or conway buckles (optional)
- 30 small straight pins or 20 stainless steel brads for horseshoe nails

Estimated construction time: 25 hours

Supplies

- sewing machine
- sewing shears
- paper cutting scissors
- straight pins
- tailor’s chalk
- seam ripper
- ruler
- rubber cement
- hand sewing needle
- thimble
- dowel or wooden spoon
- x-acto knife or single edge razor blade
- iron
- awl, leather punch, or rivet setter
- 8 x 15 inch piece of sturdy cardboard
- tacky glue
- scotch tape
Cutting Directions

1. Remove pattern pages from center of book. Cut out and assemble pattern pieces for body, legs, mane facing, ears, upper back, belly, scrotum, sheath, tail, head, and crotch gusset. Use paper pattern pieces or trace on to non-woven interfacing.
2. With right sides together, fold imitation suede in half. Follow layout chart to pin pattern pieces to imitation suede. Cut.
3. Cut muzzle, chin, ear linings and penis from matching felt.
4. Cut mouth lining and nostrils from pink felt.
5. Cut frogs of feet from tan felt.
6. Cut tongue from dark pink or red felt.
7. Cut hooves from black vinyl.
8. Cut soles from tan vinyl.
9. Cut mane and tail interfacings from fusible interfacing.
10. Cut four insoles from cereal box cardboard.
11. Cut four chestnuts from sponge.
12. Cut four shoes from tooling foil.

Marking Directions

1. Mark dots and X’s with chalk or tailor’s tacks.
2. With tailor’s chalk or pencil, mark fold lines, tongue, scrotum, leg, eye, ear, zipper, mane, and tail placement.

Sewing Instructions

1. Use 1/4 inch seam allowance, except where indicated.
2. Backstitch at start and finish of seams to lock stitches.
Step 1. Mane

1. Wrap yarn around the 8 inch width of 8 x 15 inch cardboard to the desired thickness.

2. Fold mane interfacing (pattern piece 2) lengthwise with fusing surfaces together. Put over the 15 inch side of cardboard containing yarn. Iron lightly until interfacing begins to fuse. Carefully slide cardboard from yarn. Iron interfacing until yarn is fully fused to interfacing.

3. Fold mane facing (pattern piece 11B) lengthwise with wrong sides together. Put on top of interfacing. Pin. Stitch along seamline A.

Step 2. Tail

1. Slash tail as marked (pattern piece 2).

2. Wrap yarn around cardboard 14 or more inches long to desired length and thickness.

3. Slide one end of yarn loops over your finger. From the right side, push these loops through the slash of the tail (pattern piece 2) to its wrong side. Position the top of the loops 1/2 inch above the top of the slash.

4. Place flap of slash over loops.

5. On wrong side of tail, place tail interfacing (pattern piece 3) over loops of yarn. Iron until fully fused.

6. On right side of tail, stitch 1/8 inch from slash around yarn of tail. Be careful not to catch any strands of yarn in the stitching.


8. Trim seam. Press flat between large and small dots. Stitch across lower layers of yarn to anchor in place. Apply tacky glue to yarn and stick to tail between large and small dots. Allow glue to dry.
Step 3. Upper Back
1. Pin mane to right side of one upper back piece (pattern piece 4) along seamline B as marked. Stitch. Be sure facing does not show on right side.
2. Pin tail to right side of upper back along seamline B as marked.
3. With right sides together, pin upper back pieces together along seamline B. Stitch.

Step 4. Ears
1. Pin ear lining to right side of ear (pattern piece 5) along seamline C. Stitch.
2. Clip curves. Trim seams. Turn right side out.
4. Pin ears to upper back (pattern piece 4) along seamline D as marked. Baste.

Step 5. Joining Upper Back
1. With right sides together, pin upper back to body (pattern piece 4) along seamline D. Stitch. Repeat for other side. Turn right side out.
2. Clip mane and tail loops. Trim to desired length.
Step 6. Rectum

1. Open 1/2 inch of seamline D along upper back (pattern piece 4) to 1/4 inch below tail.
2. From wrong side, insert 1/4 inch tubing. Whip stitch in place.

Step 7. Sheath

1. With wrong sides together, fold sheath (pattern piece 6).
2. Pin sheath along seamline E. Stitch. Turn under raw edges of one end.
4. Insert penis into end of sheath. Whip stitch into place.
5. Tuck penis into sheath.

Step 8. Scrotum

1. Turn under 1/2 inch on narrow end of scrotum (pattern piece 8). Stitch.
2. Pin velcro to scrotum pieces on wrong side of pattern. Stitch.
3. With right sides together, pin seamline F. Stitch.
4. Turn right side out.

Step 9. Belly

1. With right sides together, pin sheath to one side of belly (pattern piece 9) along seamline G as marked. Baste.
2. With right sides together, pin belly pieces together along seamline G. Baste between small dots for zipper placement.* Machine stitch remainder of seam.

* Note: Do not machine stitch zipper.
Step 10. Zipper
2. Stitch zipper in place through seam allowance.
3. Open seam allowance between dots.

Step 11. Joining Belly to Body
1. With right sides together, pin belly to body (pattern piece 10) along seamline H. Stitch. Repeat for other side. Turn right side out.

Step 12. Storage Liner
1. Center storage liner (pattern piece 11) inside body over zipper. Hand stitch in place.
2. Firmly stuff body with fiberfill.

Step 13. Crotch Gusset
1. Pin crotch gusset (pattern piece 12) to open area between hind legs with right side out. Whip stitch in place.
2. Pin end of upper back over gusset. Whip stitch in place.
Step 14. Scrotum
2. Insert two marbles or large beads.

Step 15. Legs
1. With right sides of front legs (pattern pieces 13 and 14) together, pin and stitch seams I and J. Repeat for other front leg.
2. With right sides of rear legs (pieces 7 and 8) together, pin and stitch seams K and L. Repeat for other rear leg.

Step 16. Soles
1. Slash sole as marked (pattern piece 17).
2. With wrong sides together, stitch darts.
3. Placing sides A together, fold frog (pattern piece 18) as marked.
4. With right sides together, align sides A of folded frog with one slashed side of sole.
5. With right sides together, fold sole lengthwise and sandwich frog between edges of slash. Pin.
6. Allowing a 1/8 inch seam, stitch.
8. Repeat for other three soles.
Step 17. Feet

1. With right sides together, pin soles (pattern piece 16) to legs along seamline M. Allow for 1/8 inch seam. Stitch. Repeat for other three legs.
2. Use dowel or wooden spoon to turn legs right side out.

Step 18. Insoles

1. Fold insole (pattern piece 19) lengthwise. Insert through leg to wrong side of sole. Position above sole. Repeat for other three legs.

Step 19. Stuffing

1. Pack small tufts of fiberfill one at a time into one leg. Tamp firmly into place with a dowel or wooden spoon handle. Repeat for other three legs.

Step 20. Hooves

1. With right sides together, stitch ends of hoof (pattern piece 20) together along seamline N. Turn right side out. Repeat for other three hooves.
2. Slip hoof over foot. Hand stitch in place along seamline M with a running stitch.*

* Note: Do not draw stitches too tight or hooves will pucker.
Step 21. Chestnuts

1. Glue chestnuts to velcro (pattern piece 21).
2. Cut out velcro around chestnuts.
3. Remove bottom layer of velcro. Whip stitch to legs as marked. Attach upper layer of velcro and chestnuts to legs.

Step 22. Joining Legs to Body

1. Pin legs to body as marked.
2. Leaving outside hind quarters and outside shoulder seams open, whip stitch legs to body.
3. Lightly stuff shoulders and hind quarters to develop conformation.

Step 23. Muzzle

1. With right sides together, match notched edges of muzzle (pattern piece 22) along seamline O. Pin and stitch. Open seam flat.
2. With right sides together, match small dot on seamline P with notches on seamline O. Pin and stitch.
3. To make nostrils (pattern piece 23), fold on markings, pin and stitch seamline Q. Do not turn right side out.
4. To join nostril to muzzle, with right sides together, match seamline Q to seamline P. Pin and stitch by hand.
Step 24. Mouth

1. With right sides together, match dots and pin tongue front and back together (pattern piece 24) along seamline R. Stitch. Turn right side out.

2. Pin tongue to mouth lining (pattern piece 25) as marked. Stitch.

3. Pin chin (pattern piece 2) and muzzle (pattern piece 22) to mouth lining, matching small dots as marked. Stitch. Turn right side out.

4. With right sides out, stitch along seamline S from dot to fold.

5. Clip 1-1/4 inch from pointed ends of nostrils.

6. Divide diameter of 3/4 inch tubing into four equal sections. With x-acto knife, cut four slits which are 2 inches long.

7. With x-acto knife, drill two holes 1/8 inch from the end of each tab.

8. Insert clipped ends of nostrils into tubing. Stitching through drilled holes, fasten two tabs to each nostril.
Step 25. Face

1. With right sides together, pin jaws (pattern piece 27) to face (pattern piece 28) along seamline T. Stitch.
2. With right sides together, fold jaw as shown. Pin seamline U of jaw. Stitch.
3. With right sides together, insert underjaw (pattern piece 29) into jaw. Pin along seamline V. Stitch. Turn right side out.
4. Following installation directions accompanying eyes, attach eyes to face as marked.

Step 26. Joining Muzzle to Face

1. Lap muzzle over seamline W of face. Match dots and align corners of mouth. Pin. Whip stitch muzzle to face.
2. Stuff muzzle and head.

Step 27. Teeth

1. Cut slits in mouth lining as marked.
2. Cut teeth (pattern piece 30) from 6 inch diameter plastic plates. Bend on fold line. Glue in place.
Step 28. Finishing Mouth

Step 29. Attaching Head to Body
1. Insert tubing into neck.
2. Stuff neck firmly.
3. Turn under raw edge of head. Slip over raw edge of neck.
4. Pin head to desired position. Whip stitch head to neck.

Step 30. Horseshoes
1. Cut shoes (pattern piece 31) from tooling foil.
2. Punch holes in shoes as marked with straight pin.
Step 31. Tack

1. Use 1/2 inch wide leather or cotton braid for all tack.

   All tack is sewn by turning back 1 inch of leather, then stitching. Allowance for this is included in the directions.

   Rivets or conway buckles may be used instead of stitching.

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Step 32. Halter

1. Noseband: cut a strip of leather 7 inches long. Sew a 3/4 inch harness ring to each end.

2. Cheekpieces: cut two strips of leather 5 inches long. Sew one end of each into tops of rings on noseband. Sew 3/4 inch square harness rings into other ends of cheekpieces.

Step 33. Halter-Cheek Buckle

1. Cut strip of leather 4 inches long. Slit 1 inch from end. Push tongue of buckle through slit. Stitch end of leather in place.

2. Sew other end into top of ring of left cheekpiece.


4. Chin strap: cut a strip of leather 13 inches long. Following procedure for cheek buckle, sew buckle into one end of chin strap. Run other end through back of left cheekpiece ring, through a 1 inch round ring, through the back of the other cheekpiece buckle, and through round ring again. With x-acto knife, drill holes in end of strap space 1/2 inch apart. Buckle ends.

5. Connecting strap: cut a strip of leather 4-1/2 inches long. Folding end of strap to center, stitch a 1/2 inch D-ring to one end of connecting strap. With joint facing noseband, loop the other end over the jaw strap. Stitch. Pry open D-ring and insert 1 inch ring of chin strap. Close D-ring.
Pattern for Realistic Cloth Model Horse

Must be printed on 11" x 17" paper.

13

INSIDE FRONT LEGS

CUT 2

25

MOUTH LINING

CUT 1

of pink felt

23

NOSTRIL

CUT 2

of pink felt
Pattern for Realistic Cloth Model Horse

10a

28
FACE
CUT 1

29
UNDER JAW
CUT 1

3
TAIL INTERFACING
CUT 1

Must be printed on 11” x 17” paper.
12
CROTCH GUSSET
CUT 1

22
MUZZLE
CUT 1
of felt

30
TEETH
CUT 2
of disposable plastic plate

Must be printed on
11”x 17” paper.
Pattern for Realistic Cloth Model Horse

OUTSIDE FRONT LEGS
CUT 2

14

14a

27

JAW
CUT 2

Eye placement

Must be printed on 11"x 17" paper.
Must be printed on 11" x 17" paper.