



MOSSY THE ARMORED ANKYLOSAUR

Free Knitting Pattern

A soft four-legged dinosaur with cream armor, a pale belly, and a rounded tail club



Skill level: Intermediate | Worked primarily in the round | DK / light worsted yarn

At a glance This pattern makes one stuffed ankylosaur with a continuously knitted body, tail and club; a separate head; four shaped legs; knitted cream under-panels; and individually attached armor pieces.

1. Project Overview

Mossy is a low, broad knitted ankylosaur with a rounded snout, four sturdy legs, a pale underside, raised cream armor, and a brown tail club. The body, tail and club are worked as one continuous piece in the round. The head and legs are also worked in the round; the cream underside pieces are knitted flat and sewn on. Small armor pieces are made separately and attached after the main shaping is complete.

The pattern uses small-circumference knitting, simple increases and decreases, stockinette worked flat and in the round, I-cord, mattress stitch, and surface attachment. Magic loop or double-pointed needles can be used throughout the circular sections.

Finished Views



Check the finished posture from the front, sides, top and back before securing the final sewing tails.

2. Finished Size

Overall nose to end of club	Approximately 37-40 cm / 14.5-15.75 in
Height to tallest back plate	Approximately 17-19 cm / 6.75-7.5 in
Body length, neck to tail root	Approximately 14-15 cm / 5.5-6 in
Body depth at widest point	Approximately 9.5-10.5 cm / 3.75-4.25 in
Head length	Approximately 9.5-10.5 cm / 3.75-4.25 in
Leg length	Approximately 8.5-9.5 cm / 3.25-3.75 in

Tail, excluding club	Approximately 9-10 cm / 3.5-4 in measured along the knitted centreline
Tail club length	Approximately 4-5 cm / 1.5-2 in
Largest dorsal plate	Approximately 2.5-3 cm / 1-1.2 in tall

Finished size may vary depending on yarn, needle size, tension, stuffing and individual technique.

3. Materials and Tools

Yarn	DK / light worsted (#3) smooth cotton, cotton-acrylic or similar yarn with good stitch definition.
Olive green	Approximately 150-170 g / 5.3-6 oz for body, head, tail and legs.
Cream	Approximately 55-70 g / 1.9-2.5 oz for the underside and armor.
Dark brown	Approximately 20-25 g / 0.7-0.9 oz for tail club, toe bobbles and nostrils.
Needles	3.0 mm circular needle for magic loop or a matching set of 3.0 mm DPNs. Use a size that gives dense fabric.
Eyes	Two 10 mm black safety eyes, or black embroidery yarn for stitched eyes.
Stuffing	Approximately 150-190 g polyester fiberfill.
Other tools	Tapestry needle, locking stitch markers, removable markers, pins, scissors, measuring tape and waste yarn.

4. Safety Note

Small components Safety eyes and other small rigid components may not be suitable for projects intended for children under three years. Embroidered eyes can be used instead. Secure every yarn tail and attachment carefully.

5. Gauge and Tension

24 sts x 34 rnds = 10 x 10 cm / 4 x 4 in in stockinette worked in the round with 3.0 mm needles.

24 sts x 34 rows = 10 x 10 cm / 4 x 4 in in stockinette worked flat with the same yarn and needles.

Aim for firm, dense fabric with no visible stuffing between stitches. If your fabric is loose, use smaller needles. If it is very stiff and difficult to knit, use slightly larger needles while keeping the fabric closed enough to contain stuffing.

6. Abbreviations

BO	bind off
BOR	beginning of round
CO	cast on
k	knit

k2tog	knit 2 stitches together; decreases 1 st
kfb	knit into the front and back of the same stitch; increases 1 st
p	purl
rnd / rnds	round / rounds
row / rows	row / rows
RS	right side
ssk	slip 1 knitwise, slip 1 knitwise, then knit the 2 slipped sts together through the back loops; decreases 1 st
st / sts	stitch / stitches
WS	wrong side

7. Method and Orientation

- Circular pieces are worked in continuous rounds. Do not turn at the end of a round.
- Place the BOR marker before the first stitch and move it up after each completed round.
- For the body, tail and head, the BOR runs along the underside centre. The top-centre ridge is opposite the BOR.
- For each leg, place the BOR at the back of the limb. The widest rounded section becomes the foot and faces forward when attached.
- Front means the nose end. Back means the tail end. Right and left are described from the finished ankylosaur's point of view.
- Flat panels are worked back and forth in stockinette: knit on RS rows and purl on WS rows unless a shaping row says otherwise.

Starting rings The head and each leg begin with 6 sts. After a few rounds, use the cast-on tail to close the small centre opening neatly, then secure the tail inside the piece.

8. Construction Overview

Body, tail and club	Make 1 continuous piece. Work from the neck opening toward the tail. Stuff through the open neck. Close the tail club at the tip, then form the upward tail curve with a concealed top-centre shaping line before attaching armor.
Head	Make 1. Work from the snout toward the neck. Install eyes while the neck is open. Stuff and sew to the 36-st body neck opening.
Cream jaw panel	Make 1 flat piece. Leave unstuffed. Sew to the underside of the head before final head-to-body joining.
Cream belly panel	Make 1 flat piece. Leave unstuffed. Sew to the underside of the stuffed body before the legs are attached.
Cream tail underside strip	Make 1 flat piece. Leave unstuffed. Work 30 rows and sew it smoothly along the curved underside of the tail, wide end at the tail root.

Legs	Make 4. Stuff the feet more firmly than the upper legs. Keep the top 2 cm / 3/4 in soft, flatten the 18-st opening side-to-side into 9 paired attachment positions, and attach the edge front-to-back through both layers.
Toe bobbles	Make 12, three per foot. Leave unstuffed or fill with the yarn tail only.
Dorsal plates	Make 3 large, 2 medium and 2 small. Lightly stuff. Leave cast-on bases open for sewing.
Upper side cones	Make 8. Lightly stuff. Leave cast-on bases open for sewing; use four pointed cones on each side.
Lower side armor knobs	Make 4. Lightly stuff. Leave cast-on bases open for sewing; use two rounded knobs on each side.

9. Sewing Methods

- Open round to open round: use mattress stitch or a small backstitch, matching one head edge stitch to one body edge stitch around the full circumference.
- Flat panel to stuffed surface: whip stitch through one edge strand of the panel and one horizontal strand of the body fabric. Keep the thread tension even so the panel lies flat.
- Flattened leg opening: with the foot pointing straight forward and the BOR centred at the back of the limb, flatten the 18-st top opening side-to-side so the two layers are the left and right halves of the leg. Pair the edge into 9 attachment positions. Sew this 9-pair edge front-to-back on the body, passing through both leg layers before entering the body fabric at every attachment stitch.
- Armor base attachment: whip stitch around the open cast-on base, catching only the outer body strands so each dorsal plate, upper side cone or lower side knob remains correctly oriented.
- Decorative cream outline: use evenly spaced running stitches through only the outer knit strands. Do not pull tightly enough to pucker the fabric.

10. Body, Tail and Tail Club

With olive green, CO 36 sts. Join to work in the round, taking care not to twist. Place the BOR marker at the underside centre. The cast-on edge remains open for the head attachment.

Body

Rnd	Instruction	Count
1	Knit every st.	36
2	(K5, kfb) 6 times.	42
3	Knit every st.	42
4	(K6, kfb) 6 times.	48
5	Knit every st.	48
6	(K7, kfb) 6 times.	54
7	Knit every st.	54
8	(K8, kfb) 6 times.	60
9	Knit every st.	60
10	(K9, kfb) 6 times.	66
11	Knit every st.	66

Rnd	Instruction	Count
12	(K10, kfb) 6 times.	72
13	Knit every st.	72
14	Knit every st.	72
15	Knit every st.	72
16	Knit every st.	72
17	Knit every st.	72
18	Knit every st.	72
19	Knit every st.	72
20	Knit every st.	72
21	Knit every st.	72
22	Knit every st.	72
23	Knit every st.	72
24	Knit every st.	72
25	Knit every st.	72
26	Knit every st.	72
27	Knit every st.	72
28	Knit every st.	72
29	Knit every st.	72
30	Knit every st.	72
31	Knit every st.	72
32	Knit every st.	72
33	Knit every st.	72
34	Knit every st.	72
35	Knit every st.	72
36	Knit every st.	72
37	(K10, k2tog) 6 times.	66
38	Knit every st.	66
39	(K9, k2tog) 6 times.	60
40	Knit every st.	60
41	(K8, k2tog) 6 times.	54
42	Knit every st.	54
43	(K7, k2tog) 6 times.	48
44	Knit every st.	48
45	(K6, k2tog) 6 times.	42
46	Knit every st.	42
47	(K5, k2tog) 6 times.	36
48	Knit every st.	36
49	(K4, k2tog) 6 times.	30

After Body Rnd 49, do not cut the olive yarn. Continue directly into the tail. The 30 live sts become Tail Rnd 1.

Tail

Rnd	Instruction	Count
1	Knit every st.	30
2	Knit every st.	30
3	Knit every st.	30
4	Knit every st.	30
5	Knit every st.	30
6	(K3, k2tog) 6 times.	24
7	Knit every st.	24
8	Knit every st.	24
9	Knit every st.	24
10	Knit every st.	24
11	Knit every st.	24
12	Knit every st.	24
13	Knit every st.	24
14	(K2, k2tog) 6 times.	18
15	Knit every st.	18
16	Knit every st.	18
17	Knit every st.	18
18	Knit every st.	18
19	Knit every st.	18
20	Knit every st.	18
21	Knit every st.	18
22	Knit every st.	18
23	Knit every st.	18
24	(K1, k2tog) 6 times.	12
25	Knit every st.	12
26	Knit every st.	12
27	Knit every st.	12
28	Knit every st.	12
29	Knit every st.	12
30	Knit every st.	12
31	Knit every st.	12
32	Knit every st.	12

After Tail Rnd 32, keep the 12 sts live and change to dark brown for the club.

Tail Club

Rnd	Instruction	Count
1	With brown, kfb in every st.	24
2	(K1, kfb) 12 times.	36

Rnd	Instruction	Count
3	Knit every st.	36
4	Knit every st.	36
5	Knit every st.	36
6	Knit every st.	36
7	Knit every st.	36
8	Knit every st.	36
9	Knit every st.	36
10	Knit every st.	36
11	Knit every st.	36
12	(K1, k2tog) 12 times.	24
13	K2tog around.	12
14	K2tog around.	6

After Club Rnd 13, stuff the club firmly but keep it rounded rather than hard. Add stuffing down the tail in small portions. Work Club Rnd 14, break yarn leaving a 15 cm / 6 in tail, thread it through the remaining 6 sts, pull closed and secure inside the club.

Tail curve shaping: Orient the tail with the BOR centred underneath. With olive yarn, work a concealed ladder-style shaping line along the top-centre line opposite the BOR, taking small anchoring bites around Tail Rnds 6, 12, 18, 24 and 30. Draw the shaping yarn up gradually so the tail forms one continuous upward curve rather than a single kink. At the stated gauge, set the centre of the brown club approximately 4-4.5 cm / 1.6-1.8 in above the centreline of the tail root when viewed from the side. Secure the shaping yarn and bury the ends before attaching the armor.

Stuff the body through the open neck. Keep the torso firm and oval, with the underside slightly flatter than the back. Leave the first 2-3 body rounds near the neck a little softer so the head seam can settle smoothly.

11. Head

With olive green, CO 6 sts. Divide across needles, join in the round and place the BOR marker at the underside centre. Leave a 15 cm / 6 in cast-on tail. After Rnd 4, use that tail to close the small opening at the snout tip and secure it inside.

Rnd	Instruction	Count
1	Kfb in every st.	12
2	(K1, kfb) 6 times.	18
3	Knit every st.	18
4	(K2, kfb) 6 times.	24
5	Knit every st.	24
6	(K3, kfb) 6 times.	30
7	Knit every st.	30
8	(K4, kfb) 6 times.	36
9	Knit every st.	36
10	(K5, kfb) 6 times.	42
11	Knit every st.	42
12	(K6, kfb) 6 times.	48
13	Knit every st.	48

Rnd	Instruction	Count
14	Knit every st.	48
15	Knit every st.	48
16	Knit every st.	48
17	Knit every st.	48
18	Knit every st.	48
19	(K7, kfb) 6 times.	54
20	Knit every st.	54
21	Knit every st.	54
22	Knit every st.	54
23	Knit every st.	54
24	Knit every st.	54
25	Knit every st.	54
26	Knit every st.	54
27	Knit every st.	54
28	(K7, k2tog) 6 times.	48
29	Knit every st.	48
30	(K6, k2tog) 6 times.	42
31	Knit every st.	42
32	(K5, k2tog) 6 times.	36
33	Knit every st.	36
34	Knit every st.	36
35	Knit every st.	36

Eye Placement / Marking - Before Stuffing

For safety eyes, place the stems between Head Rnds 16 and 17. With the BOR at the underside centre, place one eye about 12 sts to one side of the BOR and the second eye about 12 sts to the opposite side. Check from the front that both eyes are level and equally far from the snout before fastening the washers.

For embroidered eyes, mark the same positions with removable yarn before stuffing. After the head is lightly stuffed and the cream jaw panel has been sewn on, stitch the eyes as compact black ovals at the marked positions before joining the head to the body.

After Head Rnd 35, BO all 36 sts loosely. Leave a long olive tail for joining the head to the body.

Lightly stuff the head through the neck opening. Shape the snout into a softly rounded wedge rather than a sphere. Keep the neck edge soft until the cream jaw panel is sewn on.

12. Cream Jaw Panel

With cream yarn, CO 10 sts. Work flat in stockinette. Keep the cast-on and bind-off edges relaxed so the panel can follow the head curve.

Row	Instruction	Count
1	K1, kfb, K6, kfb, K1.	12
2	Purl every st.	12

Row	Instruction	Count
3	K1, kfb, K8, kfb, K1.	14
4	Purl every st.	14
5	K1, kfb, K10, kfb, K1.	16
6	Purl every st.	16
7	K1, kfb, K12, kfb, K1.	18
8	Purl every st.	18
9	K1, kfb, K14, kfb, K1.	20
10	Purl every st.	20
11	Knit every st.	20
12	Purl every st.	20
13	Knit every st.	20
14	Purl every st.	20
15	Knit every st.	20
16	Purl every st.	20
17	Knit every st.	20
18	Purl every st.	20
19	K1, ssk, K16, k2tog, K1.	18
20	Purl every st.	18
21	K1, ssk, K14, k2tog, K1.	16
22	Purl every st.	16
23	K1, ssk, K12, k2tog, K1.	14
24	Purl every st.	14
25	K1, ssk, K10, k2tog, K1.	12
26	Purl every st.	12
27	K1, ssk, K8, k2tog, K1.	10
28	Purl every st.	10

After Row 28, BO 10 sts. Leave a long cream tail for sewing. The wider middle section belongs beneath the fullest part of the head; the narrow ends point toward the snout tip and neck.

Jaw Panel Placement

Pin the panel along the underside of the lightly stuffed head. Place the narrow front end at approximately Head Rnds 6-7. Place the narrow back end at Head Rnds 34-35, so it touches the neck bind-off edge without wrapping over it. Centre the complete panel on the head BOR. When the head is joined to the body, the back edge of the cream jaw panel must meet the front edge of the cream belly panel at the neck seam with no intervening green band.

Whip stitch around the entire panel edge, catching one cream edge strand and one outer green strand at a time. Add or remove a little head stuffing as needed so the cream panel lies smooth and the snout stays rounded.

13. Cream Belly Panel

With cream yarn, CO 10 sts. Work flat in stockinette. This elongated oval covers the underside of the torso from the neck opening to the tail root.

Row	Instruction	Count
1	K1, kfb, K6, kfb, K1.	12
2	Purl every st.	12
3	K1, kfb, K8, kfb, K1.	14
4	Purl every st.	14
5	K1, kfb, K10, kfb, K1.	16
6	Purl every st.	16
7	K1, kfb, K12, kfb, K1.	18
8	Purl every st.	18
9	K1, kfb, K14, kfb, K1.	20
10	Purl every st.	20
11	K1, kfb, K16, kfb, K1.	22
12	Purl every st.	22
13	K1, kfb, K18, kfb, K1.	24
14	Purl every st.	24
15	Knit every st.	24
16	Purl every st.	24
17	Knit every st.	24
18	Purl every st.	24
19	Knit every st.	24
20	Purl every st.	24
21	Knit every st.	24
22	Purl every st.	24
23	Knit every st.	24
24	Purl every st.	24
25	Knit every st.	24
26	Purl every st.	24
27	Knit every st.	24
28	Purl every st.	24
29	Knit every st.	24
30	Purl every st.	24
31	Knit every st.	24
32	Purl every st.	24
33	Knit every st.	24
34	Purl every st.	24
35	K1, ssk, K20, k2tog, K1.	22
36	Purl every st.	22
37	K1, ssk, K18, k2tog, K1.	20
38	Purl every st.	20
39	K1, ssk, K16, k2tog, K1.	18

Row	Instruction	Count
40	Purl every st.	18
41	K1, ssk, K14, k2tog, K1.	16
42	Purl every st.	16
43	K1, ssk, K12, k2tog, K1.	14
44	Purl every st.	14
45	K1, ssk, K10, k2tog, K1.	12
46	Purl every st.	12
47	K1, ssk, K8, k2tog, K1.	10
48	Purl every st.	10

After Row 48, BO 10 sts. Leave a long cream tail for sewing.

Belly Panel Placement

With the body already stuffed, pin the panel along the underside centre so its narrow front end touches the body cast-on edge and its narrow back end reaches Body Rnd 49 at the body-to-tail transition. Centre every row over the body BOR line.

Sew around the panel with a small whip stitch. Work from the neck end toward the tail root, alternating sides every few centimetres so the panel stays centred. Do not pull the edge tight; the cream section should remain broad and smooth.

14. Cream Tail Underside Strip

With cream yarn, CO 8 sts. Work flat in stockinette. The wide end begins at the tail root and the narrow end points toward the club.

Row	Instruction	Count
1	Knit every st.	8
2	Purl every st.	8
3	Knit every st.	8
4	Purl every st.	8
5	Knit every st.	8
6	Purl every st.	8
7	Knit every st.	8
8	Purl every st.	8
9	Knit every st.	8
10	Purl every st.	8
11	Knit every st.	8
12	Purl every st.	8
13	K1, ssk, K2, k2tog, K1.	6
14	Purl every st.	6
15	Knit every st.	6
16	Purl every st.	6
17	Knit every st.	6

Row	Instruction	Count
18	Purl every st.	6
19	Knit every st.	6
20	Purl every st.	6
21	K1, ssk, k2tog, K1.	4
22	Purl every st.	4
23	Knit every st.	4
24	Purl every st.	4
25	Knit every st.	4
26	Purl every st.	4
27	K4.	4
28	P4.	4
29	K4.	4
30	P4.	4

After Row 30, BO 4 sts. Leave a long cream tail for sewing.

Tail Strip Placement

Pin the wide end at Tail Rnd 1, centred on the tail BOR, so its front edge meets the back edge of the cream belly panel cleanly at the Body Rnd 49 / Tail Rnd 1 transition. If needed, use two or three small hidden cream stitches to join the adjacent panel edges; do not overlap one panel over the other. Run the strip smoothly along the curved underside and finish the narrow end around Tail Rnds 30-31, leaving a short olive section before the brown club. Do not use the strip to pull the tail downward.

Whip stitch around the strip with even tension. Keep it centred on the BOR and allow it to follow the established upward curve without twisting or flattening the tail.

15. Legs - Make 4

With olive green, CO 6 sts for each leg. Divide across needles, join in the round and place the BOR marker at the back of the limb. Leave a 15 cm / 6 in cast-on tail. After Rnd 4, use the tail to close the small opening at the foot tip and secure it inside.

Rnd	Instruction	Count
1	Kfb in every st.	12
2	(K1, kfb) 6 times.	18
3	Knit every st.	18
4	(K2, kfb) 6 times.	24
5	Knit every st.	24
6	(K3, kfb) 6 times.	30
7	Knit every st.	30
8	Knit every st.	30
9	Knit every st.	30
10	Knit every st.	30
11	Knit every st.	30
12	Knit every st.	30

Rnd	Instruction	Count
13	(K3, k2tog) 6 times.	24
14	Knit every st.	24
15	Knit every st.	24
16	Knit every st.	24
17	Knit every st.	24
18	Knit every st.	24
19	Knit every st.	24
20	Knit every st.	24
21	Knit every st.	24
22	Knit every st.	24
23	Knit every st.	24
24	Knit every st.	24
25	Knit every st.	24
26	(K2, k2tog) 6 times.	18
27	Knit every st.	18
28	Knit every st.	18
29	Knit every st.	18
30	Knit every st.	18

After Rnd 30, BO all 18 sts loosely, leaving a long tail for attachment.

Stuffing and Foot Angle

Stuff Rnds 1-12 firmly enough to make a rounded foot. Stuff the leg shaft moderately. Keep Rnds 27-30 soft so the opening can flatten cleanly. Bend the foot forward at the narrowing around Rnds 12-13. If needed, use two or three hidden olive stitches across the back of the ankle to hold a gentle 20-30 degree forward bend.

With the foot pointing straight forward and the BOR centred at the back of the limb, flatten the 18-st top opening side-to-side, so the two layers are the left and right halves of the leg. Pair the edge into 9 attachment positions. The flattened 9-pair edge must run from the front of the limb to the back when the foot points forward.

16. Toe Bobbles - Make 12

With dark brown, CO 4 sts. Work each toe as a short I-cord. To make I-cord, knit the sts, slide them to the other end of the DPN instead of turning, bring the working yarn across the back and knit again.

Row	Instruction	Count
1	Work 4-st I-cord: K4, slide sts to the other end of the needle; do not turn.	4
2	K4, slide sts to the other end of the needle; do not turn.	4
3	K4, slide sts to the other end of the needle; do not turn.	4
4	K4, slide sts to the other end of the needle; do not turn.	4
5	K2tog twice.	2
6	K2tog.	1

After Row 6, break yarn leaving a 10 cm / 4 in tail and draw it through the last st. Use the cast-on tail to attach the open end of the toe to the foot. Make three toes per leg, evenly spaced across the front of the widest foot section around Leg Rnds 6-10. Angle the outer toes slightly outward and the centre toe straight forward.

17. Dorsal Plates

Work all plates in cream. Each plate is knitted in the round from its open base toward its closed tip. Keep the cast-on edge open for sewing. Lightly stuff only enough to hold the shape upright.

Large Plate - Make 3

CO 18 sts, join in the round and place BOR.

Rnd	Instruction	Count
1	Knit every st.	18
2	Knit every st.	18
3	Knit every st.	18
4	(K1, k2tog) 6 times.	12
5	Knit every st.	12
6	Knit every st.	12
7	Knit every st.	12
8	K2tog around.	6
9	Knit every st.	6

Break yarn, draw through the remaining 6 sts and close the tip. Leave the cast-on base open.

Medium Plate - Make 2

CO 15 sts, join in the round and place BOR.

Rnd	Instruction	Count
1	Knit every st.	15
2	Knit every st.	15
3	(K1, k2tog) 5 times.	10
4	Knit every st.	10
5	Knit every st.	10
6	K2tog around.	5

Break yarn, draw through the remaining 5 sts and close the tip. Leave the cast-on base open.

Upper Side Cones - Make 8

Work exactly as the Medium Plate. CO 15 sts, join in the round and place BOR.

Rnd	Instruction	Count
1	Knit every st.	15
2	Knit every st.	15
3	(K1, k2tog) 5 times.	10
4	Knit every st.	10
5	Knit every st.	10
6	K2tog around.	5

Break yarn and draw through the remaining 5 sts. Leave the cast-on base open and lightly stuff.

Small Plate - Make 2

CO 12 sts, join in the round and place BOR.

Rnd	Instruction	Count
1	Knit every st.	12
2	Knit every st.	12
3	(K1, k2tog) 4 times.	8
4	Knit every st.	8
5	K2tog around.	4

Break yarn, draw through the remaining 4 sts and close the tip. Leave the cast-on base open.

18. Lower Side Armor Knobs - Make 4

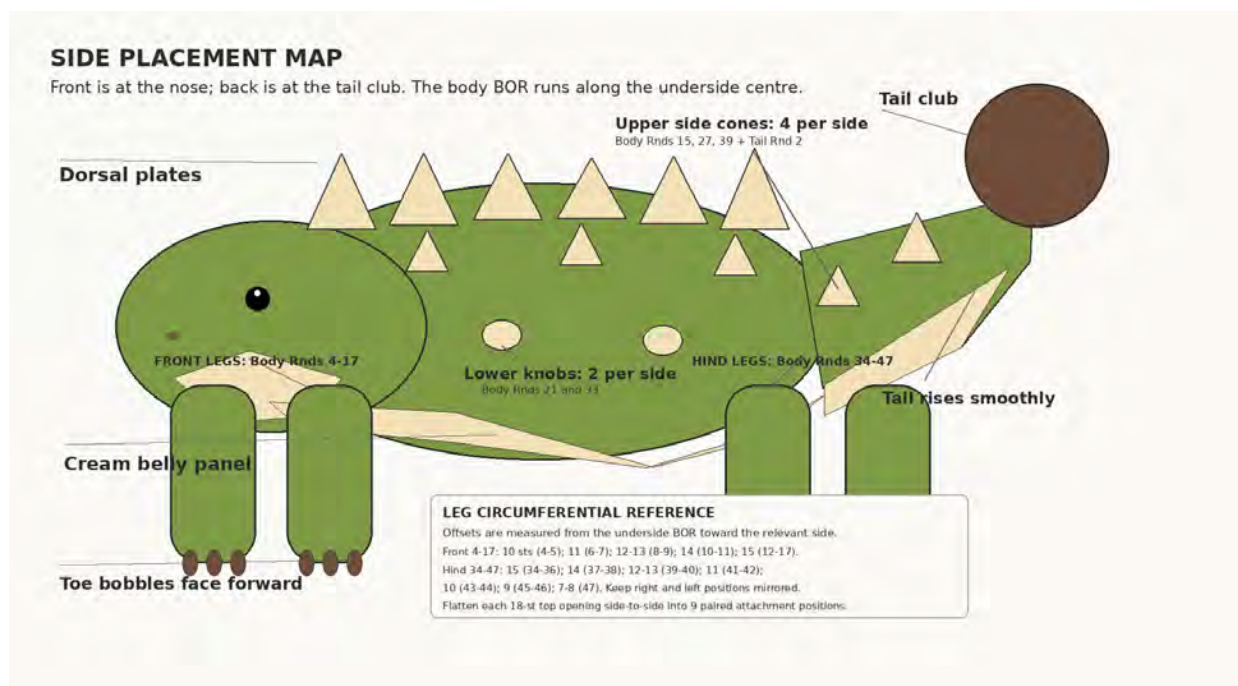
With cream, CO 8 sts. Join in the round. These four pieces form low rounded domes for the lower side-armor row.

Rnd	Instruction	Count
1	Kfb in every st.	16
2	Knit every st.	16
3	Knit every st.	16
4	K2tog around.	8
5	Knit every st.	8

Break yarn, draw through the remaining 8 sts and close the top. Lightly stuff from the open cast-on base. Leave a long cream tail for sewing the base to the body.

19. Placement Maps

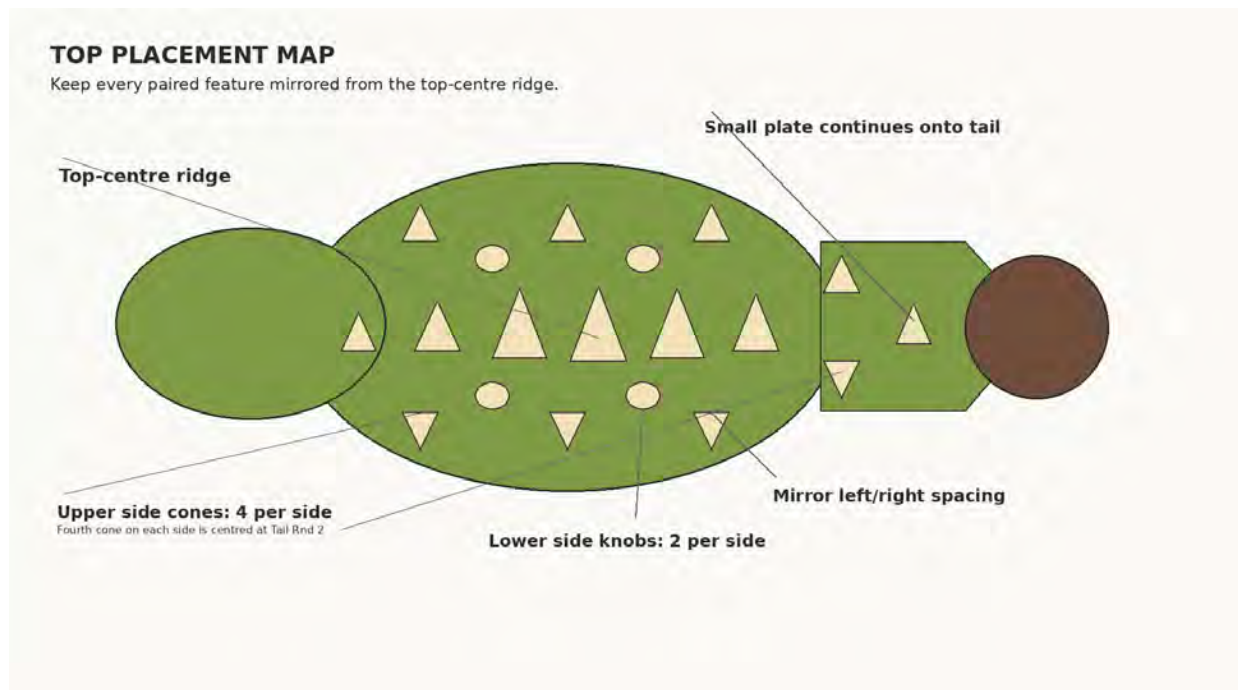
Pin all armor pieces before sewing. Check Mossy from the side, top and front. The dorsal plates should form one centred ridge. On each side, four pointed upper-side cones should sit above two rounded lower-side knobs in mirrored staggered rows, with the fourth pointed cone positioned at the side of the tail root.



Dorsal Ridge Placement

Plate	Longitudinal centre	Position around body
1 - Small	Body Rnd 8	Top centre
2 - Medium	Body Rnd 14	Top centre
3 - Large	Body Rnd 21	Top centre
4 - Large	Body Rnd 28	Top centre
5 - Large	Body Rnd 35	Top centre
6 - Medium	Body Rnd 43	Top centre
7 - Small	Tail Rnd 9	Top centre

At each location, centre the open plate base on the top-centre line opposite the BOR. Keep each plate upright. The three large plates should sit across the broadest section of the torso.



Side Armor Placement - Mirror on Both Sides

Upper row - pointed cones at Body Rnds 15, 27 and 39, plus one at Tail Rnd 2	About 2.3 cm / 7/8 in below the top-centre ridge
Lower row - rounded knobs at Body Rnds 21 and 33	About 3.8 cm / 1.5 in below the top-centre ridge

On each side, place four pointed upper-side cones and two rounded lower-side knobs. Position the upper cones at Body Rnds 15, 27 and 39, with the fourth cone centred approximately at Tail Rnd 2 on the side of the tail root. Position the lower rounded knobs at Body Rnds 21 and 33. Mirror all positions from right to left and keep the upper and lower rows staggered rather than vertically stacked.

20. Leg Placement

Mark two mirror-image lower-side attachment centre-lines, one on each side of the body. The front-leg seams run over Body Rnds 4-17 and the hind-leg seams run over Body Rnds 34-47. Keep the same physical lower-side angle as the body circumference changes by scaling the distance from the underside BOR. For each front leg, use approximately 10 sts from BOR on Body Rnds 4-5, 11 sts on Rnds 6-7, 12-13 sts on Rnds 8-9, 14 sts on Rnds 10-11, and 15 sts on Rnds 12-17. For each hind leg, use approximately 15 sts from BOR on Rnds 34-36, 14 sts on Rnds 37-38, 12-13 sts on Rnds 39-40, 11 sts on Rnds 41-42, 10 sts on Rnds 43-44, 9 sts on Rnds 45-46, and 7-8 sts on Rnd 47. Keep right and left positions exactly mirrored. Each flattened leg opening provides 9 paired attachment positions and its seam runs front-to-back.

Leg	Body range	Circumferential centre
Front right	Body Rnds 4-17	10 sts at Rnds 4-5; 11 at 6-7; 12-13 at 8-9; 14 at 10-11; 15 at 12-17
Front left	Body Rnds 4-17	Mirror the right-front offsets
Hind right	Body Rnds 34-47	15 sts at 34-36; 14 at 37-38; 12-13 at 39-40; 11 at 41-42; 10 at 43-44; 9 at 45-46; 7-8 at 47
Hind left	Body Rnds 34-47	Mirror the right-hind offsets

Pin all four legs before sewing. Set the body on a flat surface and adjust the legs until the belly is level, the front feet point forward and the hind feet support the rump without splaying. The front pair spans Body Rnds 4-17 and the hind pair spans Body Rnds 34-47. Keep each mirrored pair at the same height and angle, and confirm that a clear section of body remains visible between the front and hind attachment seams.

21. Assembly Instructions

1. Finish the body, tail and club. Stuff the club firmly, the tail moderately and the torso firmly, keeping the neck edge slightly soft. With the tail BOR underneath, work the concealed top-centre shaping line at Tail Rnds 6, 12, 18, 24 and 30. Draw it up gradually until the tail forms one continuous upward curve and the centre of the brown club sits approximately 4-4.5 cm / 1.6-1.8 in above the centreline of the tail root in side view.
2. Pin and sew the cream belly panel to the underside of the body with its rear edge reaching Body Rnd 49. Then pin the 30-row cream tail underside strip along the already-curved tail, placing its wide front edge at Tail Rnd 1 so it meets the belly panel cleanly at the body-to-tail transition. Join the adjacent cream edges with a few hidden stitches if necessary. Continue the strip to approximately Tail Rnds 30-31 and sew with even tension so it follows the curve without pulling the tail downward.
3. Prepare the head. Install safety eyes while the neck opening is accessible, or retain the marked positions for embroidered eyes. Lightly stuff the head, pin the cream jaw panel with its back edge at Head Rnds 34-35 touching the neck bind-off edge, sew it in place, then adjust the stuffing.
4. Embroider the two nostrils with dark brown yarn. Make each nostril a short horizontal satin stitch about 4-5 mm / 3/16 in long, positioned approximately 1 cm / 3/8 in above the front edge of the cream jaw panel and about 1.5 cm / 5/8 in apart. If using embroidered eyes, stitch them now as compact black ovals at the marked positions.
5. Pin the 36-st head neck edge to the 36-st body neck opening. Match the head BOR to the body BOR at the underside centre and match the top-centre points. At the underside, align the back edge of the cream jaw panel directly with the front edge of the cream belly panel so the cream underside is continuous across the neck seam with no intervening green band. Sew about two thirds of the circumference with mattress stitch or small backstitch, add final stuffing through the remaining gap, then finish the seam. The snout should point straight forward, not upward or downward.

6. Attach three dark-brown toe bobbles to each foot. Keep the centre toe forward and angle the outer toes slightly outward.
7. Pin the front legs over Body Rnds 4-17 and the hind legs over Body Rnds 34-47. Before sewing, verify the circumferential centre-lines against Section 20, scaling the BOR offsets as the body expands at the shoulder and tapers toward the tail. Recheck the posture from front, side and top. Keep each foot pointing forward and each 18-st top opening flattened side-to-side into 9 paired positions. Sew every seam front-to-back through both layers of the leg opening, keeping the right and left positions mirrored. Confirm that a clear section of body remains visible between the front and hind attachment seams before securing the sewing tails.
8. Lightly stuff the seven dorsal plates. Pin them in ridge order from Body Rnd 8 to Tail Rnd 9. Sew each open cast-on base to the body with small whip stitches. Keep the tips upright and centred.
9. Lightly stuff the eight upper side cones and four lower side armor knobs. On each side, pin the pointed cones at Body Rnds 15, 27 and 39, plus one at the tail root centred approximately at Tail Rnd 2. Pin the rounded knobs at Body Rnds 21 and 33. Mirror the positions on the opposite side, then sew around each open base without flattening the shape.
10. With cream yarn, add decorative outline running stitches around the head-to-body seam, the top of each leg attachment, the base of every dorsal plate and side armor piece, and the olive-to-brown club transition. Keep the stitches about 5-7 mm / 1/4 in apart and pull only enough to settle them against the surface.
11. Remove all markers. Shape the torso with your hands, redistribute stuffing if needed, secure and bury every remaining yarn tail.

22. Finishing and Shape Checks

Set Mossy on a flat surface before burying the final attachment tails. The four feet should contact the surface, the belly should be level, and the tail should rise in one smooth curve. In side view, the centre of the brown club should sit approximately 4-4.5 cm / 1.6-1.8 in above the centreline of the tail root. The head should continue the body line without a visible twist.

Cream Outline Stitching

For the visible cream outline, use a tapestry needle and cream yarn. Insert the needle under one horizontal strand of the green fabric, bring it up 5-7 mm / 1/4 in farther along, and repeat. Around circular or conical armor bases, follow the cast-on edge. Around the head seam and club transition, follow the join line. Around leg tops, place the outline just above the attachment seam so it remains visible from the side.

Final Visual Checklist

- ☐ Head centred on the body, with the snout pointing straight forward.
- ☐ Eyes level and evenly spaced.
- ☐ Nostrils matched in size and height.
- ☐ Cream jaw panel reaches the neck seam and meets the belly panel continuously, with no green band between them.
- ☐ Cream belly panel centred along the underside and lying flat.
- ☐ Cream belly panel and tail strip meet cleanly at the tail root without a gap or overlap; the strip follows the curved underside and ends around Tail Rnds 30-31 without pulling the tail downward.
- ☐ Front-leg seams span Body Rnds 4-17 and hind-leg seams span Body Rnds 34-47; the pairs are mirrored, their circumferential offsets follow Section 20, and a clear central body gap remains between the front and hind attachments.
- ☐ Feet point forward and all three toes on each foot are visible.
- ☐ Dorsal plates form one centred ridge with the largest plates over the broad torso.
- ☐ Each side has four pointed upper cones and two rounded lower knobs, mirrored and staggered; the fourth pointed cone sits at the side of the tail root.
- ☐ Tail rises in one continuous curve; club centre is approximately 4-4.5 cm / 1.6-1.8 in above the tail-root centreline and is securely closed.

- ☐ No visible stuffing, open seams, loose armor bases, trapped markers or unsecured tails.

23. Troubleshooting

Problem	Practical correction
Fabric shows stuffing	Use smaller needles or tighten tension. Add stuffing in smaller pieces so it does not push between stitches.
Finished toy is too large	Use a slightly lighter yarn or smaller needles, and match the stated gauge before starting the main pieces.
Finished toy is too small	Use a slightly heavier yarn or larger needles while keeping the fabric dense enough to contain stuffing.
Body looks round instead of low and oval	Redistribute stuffing toward the sides and back, then press the underside gently flatter. Avoid overstuffing the centre belly.
Head points up or down	Open a short section of the neck seam, reposition the head BOR to the body BOR, adjust stuffing at the neck, then resew.
One leg hangs at a different angle	Confirm that the 18-st opening was flattened side-to-side into 9 paired positions and sewn front-to-back. Compare the matching pair over the same body range: Rnds 4-17 for front legs or Rnds 34-47 for hind legs. Then verify the scaled circumferential offset from BOR for that specific body round in Section 20 before re-pinning and sewing at the matching angle.
Feet splay outward	Check that each foot points forward before sewing and that the top opening is flattened side-to-side, not front-to-back. Verify both the corrected longitudinal ranges - Body Rnds 4-17 for the front legs and 34-47 for the hind legs - and the scaled BOR offsets in Section 20. Re-pin the 9-pair edge so it runs front-to-back, keep right and left positions mirrored, and preserve a clear central body gap.
Tail twists or curves unevenly	Check that the BOR is centred underneath and the concealed shaping line is on the exact top-centre line. Loosen and retension the anchors gradually at Tail Rnds 6, 12, 18, 24 and 30, then re-pin the cream strip so it follows the curve without pulling sideways or downward.
Armor leans to one side	Remove a few attachment stitches, centre the open base on the marked line, and resew with even tension around the full base.
Side armor pieces are uneven	Compare each piece with its mirror partner from the side and top. Keep the four pointed upper cones at Body Rnds 15, 27 and 39 plus Tail Rnd 2, and the two rounded knobs at Body Rnds 21 and 33 on both sides before burying the sewing tails.
Flat cream panels curl before sewing	Pin them in place while the body or head is stuffed. Once the full edge is sewn down, the stockinette will lie flat.
Cream and olive fabrics grow at different rates	Check both flat and in-the-round stockinette gauges. Adjust needle size so the cream panels match the stated width and row length before attaching.
Visible gaps at seams	Take slightly smaller sewing bites and alternate between the two joined edges. Add a small amount of stuffing only after the seam is mostly closed.
Tail stays too straight or club sits too low	Tighten the concealed top-centre shaping line a little at each anchor rather than pulling one point sharply. Aim for one continuous curve with the club centre approximately 4-4.5 cm / 1.6-1.8 in above the tail-root centreline in side view.

Finished Mossy is complete when the posture is balanced, all armor is secure, the cream underside is smooth, and every yarn tail has been buried inside the knitted fabric.