

SURVEYING — LEADER KEY

SAINTS GLOBAL MEMBER

NAME: _____

BATTALION: _____

TROOP: _____

SKILL BADGE ADVISOR

NAME: _____

EMAIL: _____

PHONE: _____

LEADER KEY

WITH EVALUATION HINTS

Gold boxes contain leader hints for evaluating each requirement

STEP 1 | DISCOVER

INITIALS _____

- a) Demonstrate first aid responses for injuries and conditions that could occur while surveying, and explain why surveyors must identify local poisonous plants and animals. _____



LEADER KEY

Look for calm, procedural responses and environmental awareness.

STEP 2 | PLAN

INITIALS _____

- a) Set up a surveying instrument on a designated corner point and plan a radial measurement survey of a five-sided lot. _____



LEADER KEY

Ensure the Saint can set up and explain the plan independently.

STEP 3 | ACT

INITIALS _____

- a) Conduct a radial survey of a five-sided lot and nearby topographic features using traditional instruments. _____



LEADER KEY

Accuracy and documentation quality are critical.

a.1) Measure and record angles and distances to each corner _____

a.2) Measure and record five nearby topographic features _____

a.3) Maintain clear, organized field notes _____

- b) Measure the same points using GPS technology and compare results to traditional measurements. _____

 LEADER KEY

Look for understanding of strengths and weaknesses.

b.1) Record GPS distances to selected points _____

b.2) Compare differences between methods _____

b.3) Explain reasons for discrepancies _____

- c) Plot collected field data and produce a scaled map of the surveyed lot. _____

 LEADER KEY

Inspect both accuracy and presentation.

c.1) Plot points using a protractor and scale _____

c.2) Include north arrow, scale bar, title, date, and diagram _____

c.3) Maintain proportional accuracy _____

- d) Establish elevations using a benchmark and leveling equipment. _____

 LEADER KEY

Confirm correct procedure and calculations.

d.1) Assign an assumed elevation to a benchmark _____

d.2) Measure and record rod readings _____

d.3) Calculate elevations of remaining points _____

- e) Obtain and explain the key parts of a property deed and why they matter. _____

 LEADER KEY

Look for respect for legal and ethical dimensions.

STEP 4 | REFLECT

INITIALS

- a) Explain how GPS, drones, laser scanning, and other emerging technologies are changing surveying, including strengths and limitations. _____

 LEADER KEY

Listen for balanced, informed views.

- b) Describe the importance of licensed surveyors, types of surveying, and career pathways in surveying and related fields. _____

 LEADER KEY

Ensure understanding of professionalism and preparation.

END OF REQUIREMENTS

**BY SIGNING BELOW, I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT ALL
REQUIREMENTS WERE MET AT OR ABOVE THE REQUIRED STANDARDS AS OUTLINED
IN THE BADGE REQUIREMENTS CHECKLIST.**

SKILL BADGE ADVISOR

DATE (YYYY-MM-DD)