Ordinary Advancement Supplement

Worksheet and Qualification Standards

Revision 8 (9-30-2013)

Name: _____

"The approach to the Sea Scout Requirements should always be that the requirements, as printed, are minimum requirements. It is the spirit of them, that not only the letter of the printed words be observed, but that the subject be fully and thoroughly gone into." – *Crew Leader's Handbook* (1st Edition, 1942) Chapter VII

Standards of Qualification for Ordinary Sea Scout Rank

Scouts desiring to receive checkouts and signatures for Ordinary advancement requirements should normally study and research the topic then complete the section of this worksheet that pertains to the topic and present this worksheet to the official conducting the checkout before being tested for knowledge.

Many items in this worksheet can be accomplished if satisfactorily completed as a closed book test or as an oral exam that demonstrates the skill. The scout is expected to discuss or demonstrate the required knowledge/skill, not simply receive credit for being present when a group discussion occurs.

Items that are bold, underline, with italics must be accomplished through actions completed either underway or as a special class, activity, or situation.

Special Class or Situation: 2A, 2B, 3A, 3B, 4, 5G(i), 5G(iii), 5G(iv), 7D, 14, 15, Electives 16E and 16F

Demonstrate Underway: 5D, 5F, 8D, 11D, 11E, 11F, 13A, 13B, Electives 16B and 16C

Ordinary Requirements

ID	Requirement	Officer Initial	Date
	1. Ideals		
1a.	Explain the symbolism of the Sea Scout emblem. First Class Symbol: _____ Fleur Three Points: _____ Fleur Points North: _____ Eagle and Shield: _____ Scroll: _____ Knot: _____ Two Stars: _____ Anchor: _____		
1b.	Give a brief oral history of the U.S. flag. _____ _____ _____ _____		
1c.	Demonstrate how to fly, hoist, lower, fold, display and salute the U.S. flag. Explain flag etiquette and protocols for both land and sea. _____ _____ _____ _____ _____		
	2. Active Membership		
2a.	***Attend at least 75 percent of your ship's meetings and activities for six months.*** ***Note: Check with your ship's yeoman.***		
2b.	***Do one of the following. Recruit a new member for your ship and follow through until the new member is registered and formally admitted with an admissions ceremony, or assist in planning and carrying out a ship recruiting activity, such as an open house or joint activity with a youth group or organization (another Sea Scout ship will not count).*** ***Scout Recruited/Date _____*** ***OR*** ***Recruiting Activity/Date _____***		
	3. Leadership		

3a.	***Complete quarterdeck training, either as an officer or as a prospective officer.***		
3b.	***Serve as an activity chair for a major ship event. Responsibilities should include planning, directing, and evaluating the event.*** _____ _____		
	4. Swimming		
4.	***Pass all requirements for the BSA's Swimming merit badge.***		
	5. Safety		
5a.	Discuss BSA Safety Afloat with an adult leader. (list and describe the 8 points below) _____ _____ _____ _____ _____ _____ _____ _____		
5b.	Describe the safety equipment required by law for your ship's primary vessel. Life Jackets _____ Visual Distress Signals _____ Fire Extinguishers _____ Ventilation _____ Backfire Flame Control _____ Sound Producing Devices _____ Navigation Lights _____ Pollution Regulations _____ Marine Sanitation Devices _____ Certificate of Number _____		

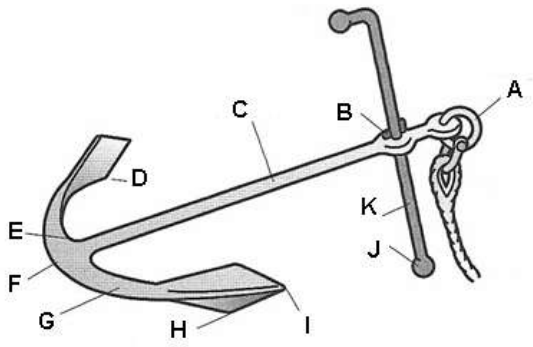
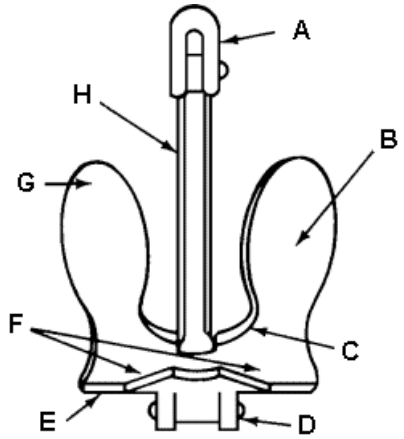
5c.	Develop a ship's station bill for your ship and review it with an adult leader. **STATION BILL** See table below.		
5d.	***Plan and practice the following drills:*** ***crew overboard Officer Initial/Date_____/_____,*** ***fire Officer Initial/Date_____/_____,*** ***and abandon ship Officer Initial/Date_____/_____.***		
5e.	Describe three types of equipment used in marine communications. _____ _____ _____		
5f.	***Demonstrate your knowledge of correct maritime communications procedures by making at least three calls to another vessel, marinas, bridges, or locks.*** ***Officer Initial/Date_____/_____,*** ***Officer Initial/Date_____/_____,*** ***Officer Initial/Date_____/_____,***		

	COLLISION	FIRE	ABANDON SHIP	
	General Alarm Word Passed—Piped	General Alarm Rapid Ring of Bell	General Alarm Bugle—Siren	
No. Name Rank Billet	Stations	Duty	Boat	Will Provide

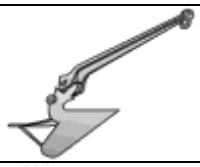
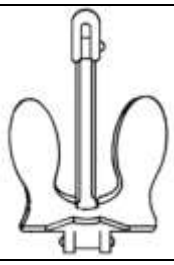
5g.	Galley i) Before an activity, **submit** a menu that uses cooked and uncooked dishes, a list of provisions, and estimated costs for a day's meal (breakfast, lunch, and dinner). Breakfast _____ _____ Lunch _____ _____ Dinner _____ _____ ***Once the provision list is approved, help obtain the items on the list.*** ***Officer Initial/Date_____/_____*** ii) **Explain** the use of charcoal, pressurized alcohol, and propane. Include safety precautions for each. Charcoal _____ Alcohol _____ Propane _____ **iii) Prepare breakfast, lunch, and dinner while on the activity. Demonstrate your ability to properly use the galley equipment or personal cooking gear generally used by your ship.** **Breakfast: Officer Initial/Date_____/_____** **Lunch: Officer Initial/Date_____/_____** **Dinner: Officer Initial/Date_____/_____** **iv) Demonstrate appropriate sanitation techniques for food preparation and meal cleanup.** **Officer Initial/Date_____/_____**		

	6. Marlinspike Seamanship		
6a.	**Name** the various materials used to manufacture rope, the advantages and disadvantages of each, _____ _____ _____ _____ And the characteristics of laid and braided rope. _____ _____ **Discuss** the meaning of lay_____, thread_____, strand_____, and hawser_____. **Explain** how rope is sized and measured. _____ _____		
6b.	Using both large and small lines, **tie** and **explain** the use of the following knots: Explain the Use stevedore's knot _____, French (double) bowline _____, bowline on a bight _____, timber hitch _____, rolling hitch _____, marline hitch _____, and midshipman's hitch _____.		
6c.	***Demonstrate your ability to secure a line to*** ***Pilings _____/_____*** ***bitts, _____/_____*** ***cleats, _____/_____*** ***and rings, _____/_____*** ***and to coil, _____/_____*** ***flake, and _____/_____*** ***Flemish a line _____/_____***		
6d.	Demonstrate how to cut and heat-seal a synthetic line, _____/_____, and whip the end of plain-laid line using waxed cord or similar material. _____/_____,		

	7. Boating Handling		
7a.	Name the principal parts of a typical sailboat and a runabout. (Label this drawing) Bow Stern Port Starboard Hull Freeboard Draft Keel Tiller Rudder Running Lights Stern Light Masthead Light Anchor Light Cleat Transom Cockpit 		
7b.	Name the principal parts of the masts, booms, spars, standing and running rigging, and sails of a gaff- or Marconi-rigged sloop, schooner, and ketch or yawl. (Label this drawing) Spinnaker Jib Genoa Mainsail Head Clew Tack Foot Leech Luff Batten Main Mast Fore Mast Mizzen Mast Boom Spinnaker Pole Whisker Pole Gaff Masthead Gooseneck Spreader Halyard Sheet Downhaul Outhaul Cunningham Vang Preventer Traveler Shroud Stay 		

7c.	Describe the identifying characteristics of a sloop, ketch, yawl, cutter, and schooner. Sloop _____ Ketch _____ Yawl _____ Cutter _____ Schooner _____ (Name the types of rigs below.)  _____ _____ _____ _____ _____		
7d.	***Demonstrate your ability to handle a rowboat by doing the following:*** ***row in a straight line for ¼ mile, stop, make a pivot turn, return to the starting point and,*** ***backwater in a straight line for 50 yards/meters. Make a turn and return to the starting point.***		
	8. Anchoring		
8a.	Name the parts of a stock anchor  ___ Crown ___ Ring ___ Arm ___ Key ___ Throat ___ Stock ___ Ball ___ Fluke ___ Palm ___ Shank ___ Pee and a stockless anchor.  ___ Crown ___ Shank ___ Fluke ___ Ring ___ Pee ___ Arm ___ Throat ___ Blade		

8b. Describe **five** types of anchors. Describe how each type holds the bottom, the kind of bottom in which it holds best, and the advantages or disadvantages of each type.

Picture	Name	Holds Best	Advantages	Disadvantages
				
				
				
				
				
				

8c. Calculate the amount of anchor rode necessary for your ship's primary vessel in the following depths: 10, 20, and 30 feet in normal and storm conditions.

	Normal	Storm
10 feet	_____	_____
20 feet	_____	_____
30 feet	_____	_____

8d. ***Demonstrate the ability to set and weigh anchor.***

	9. Navigation Rules		
9a.	Explain the purpose of *Navigation Rules, International and Inland*. Navigation Rules _____ _____ _____ International _____ _____ _____ Inland _____ _____ _____ Discuss the meaning of the following concepts from the *Navigation Rules*: Proper Lookout _____ _____ Safe Speed _____ _____ Risk of Collision _____ _____ Actions to Avoid Collision _____ _____ Narrow Channels _____ _____ Traffic Separation Schemes _____ _____ Conduct of Vessels in Sight of One Another _____ _____ Conduct of Vessels in Restricted Visibility _____ _____ Define the following terms from the *Navigation Rules*: COLREGS Demarcation _____ Danger Zone _____ Visible (when applied to lights) _____ Vessel not under command _____ Vessel constrained by draft _____ Length and Breadth _____ Secretary _____		

9b.	Know the general "Rule of Responsibility." (Describe Rule #2 Responsibility.) Discuss in your own words the passage that begins with, "Nothing in these Rules shall exonerate any vessel, or the owner, master, or crew…", Rule 2.a. _____ _____ _____ Discuss in your own words the passage that begins with, "In construing and complying with these Rules due regard shall be had …", Rule 2.b. _____ _____ _____		
9c.	Define stand-on and give-way vessels for the following situations: meeting, crossing, and overtaking for both power and sailing vessels. What actions must the Stand On Vessel make? _____ What actions must the Give Way Vessel make? _____ Rule 12 – When Sailing Vessels are Meeting When the boats are on different tacks, who is stand on and who is give way? Stand On _____ Give Way _____ When the boats are on the same tack, who is stand on and who is give way? Stand On _____ Give Way _____ Rule 13 – Overtaking When overtaking, who is stand on and who is give way? Stand On _____ Give Way _____ What is different for vessels under sail? _____ Rule 14 – Head-On Which way are meeting vessels required to turn to avoid a collision? _____ Are there any exceptions? _____ _____ Rule 15 – Crossing Generally if a vessel is approaching you on your port side, are you responsible to Give Way or Stand On? (circle answer) STAND ON GIVE WAY Generally if a vessel is approaching you on your starboard side, are you responsible to Give Way or Stand On? (circle answer) STAND ON GIVE WAY		

9d. **Explain** "Responsibility Between Vessels" (vessel priority).

Except where Navigation Rules 9 (narrow channels), 10 (separation schemes), and 13 (overtaking) otherwise require:

a) A power-driven vessel underway shall keep out of the way of (list all 4):

_____

_____

_____

_____

b) A sailing vessel underway shall keep out of the way of (list all 3):

_____

_____

_____

9e. **Explain** the navigation lights required for power-driven and sailing vessels underway.

What times and conditions are navigation lights required? _____

_____

(Identify the location, color, arc, and whether the light is required while under power and/or sail.)

	Location	Color	Arc	Power/Sail
Masthead Light				
Sidelights				
Stern Light				
All Around Light				

Explain what is required for a vessel under oars.

_____

_____

9f.	**Describe** the sound signals for maneuvering, warning, and restricted visibility. What devices are used for making sound signals? _____ _____ How long is a short blast? _____ How long is s long blast? _____ What do the following signals mean in a meeting or crossing situation? One Short Blast _____ Two Short Blasts _____ Three Short Blasts _____ What is the response for agreement? _____ What is the response for disagreement? _____ What do the following signals mean in an overtaking situation? One Short Blast _____ Two Short Blasts _____ When is a long blast used? _____ _____		
	10. Piloting and Navigation		
10a.	**Demonstrate** your understanding of latitude and longitude. (Fill in the blanks below.) _____ runs North-South with lines converging at the poles. _____ circles the Earth, parallel to the equator. Latitude is measured in degrees having the range: _____. Longitude is measured in degrees having the range: _____. Using a Mercator chart, demonstrate that you can locate your position from given coordinates Lat: _____ Lon: _____ Where: _____ and determine the coordinates of at least five aids to navigation. Aid: _____ Lat: _____ Lon: _____ Aid: _____ Lat: _____ Lon: _____ Aid: _____ Lat: _____ Lon: _____ Aid: _____ Lat: _____ Lon: _____ Aid: _____ Lat: _____ Lon: _____		

10b.

Explain the degree system of compass direction. _____

_____

_____

_____

(Box the compass to 32 points, e.g. N, NbE, NNE, etc.)

000		090		180		270	
011.25		101.25		191.25		281.25	
022.5		112.5		202.5		292.5	
033.75		123.75		213.75		303.75	
045		135		225		315	
056.25		146.25		236.25		326.25	
067.5		157.5		247.5		337.5	
078.75		168.75		258.75		348.75	

Explain variation _____

_____

and deviation _____

_____

and how they are used to convert between true headings and bearings to compass headings and bearings. _____

_____

_____

(Using the provided variation and deviations, convert the following and complete the table.)

True	Variation	Magnetic	Deviation	Compass
045	10 W			
	5 E			180
	8 W	210		
330		337		

Deviation Table (Use this table with question above.)

Ships Magnetic Head	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345
Deviation	4	4	5	5	5	4	4	3	1	0	-1	-3	-4	-4	-5	-5	-5	-4	-4	-3	-1	0	1	3

10c. **Describe** three kinds of devices used aboard ship for measuring speed and/or distance traveled and, if possible, demonstrate their use.

Speedometers: _____

GPS: _____

Patent Log: _____

Chip Log: _____

Dutchman's Log: _____

10d. Understand Universal Coordinated Time (Greenwich Mean Time or Zulu Time) and zone time.

_____

_____

_____

Demonstrate your ability to convert from one to the other for your local area.

UTC/Zulu Time	Local Time
0000	
0600	
1200	
1800	

Local Time	UTC/Zulu Time
0000	
0600	
1200	
1800	

Note: EST = UTC-5, EDT = UTC-4

10e. **Explain** the 24-hour time system _____

_____

_____

_____

and demonstrate that you can convert between 12- and 24-hour time.
(Convert the following times.)

12-hour time	**24-hour time**
12:00 AM	
4:00 AM	
8:00 AM	
12:00 PM	
4:00 PM	
8:00 PM	

12-hour time	**24-hour time**
	0100
	0500
	0900
	1300
	1700
	2100

10f. Make a dead reckoning table of compass and distances (minimum three legs) between two points, plot these on a chart, and determine the final position. Note: Ideally this requirement should be met while underway. If this is not possible, it may be simulated using charts.

Name	Latitude	Longitude	Course	Distance
Start Sarah's Creek "2"				
Finish Perrin River "PR"			N/A	N/A

11. Practical Deck Seamanship

11a. Name the seven watches

00-04 _____

04-08 _____

08-12 _____

12-16 _____

16-18 _____

18-20 _____

20-24 _____

and explain bell time.

One Bell _____

Two Bells _____

Three Bells _____

Four Bells _____

Five Bells _____

Six Bells _____

Seven Bells _____

Eight Bells _____

11b. Explain the duties of a lookout _____

_____

and demonstrate how to report objects in view _____

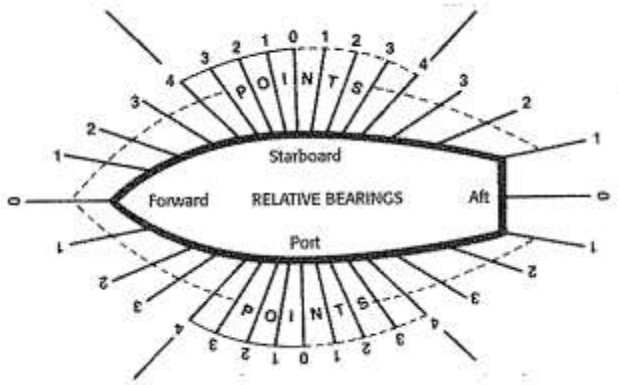
_____

and wind directions with respect to the vessel. _____

_____

11c.	Name relative bearings expressed in degrees.		
11d.	***While underway, serve as a lookout for one watch.***		

000	
011.25	
022.5	
033.75	
045	
056.25	
067.5	
078.75	
090	
101.25	
112.5	
123.75	
135	
146.25	
157.5	
168.75	
180	
191.25	
202.5	
213.75	
225	
236.25	
247.5	
258.75	
270	
281.25	
292.5	
303.75	
315	
326.25	
337.5	
348.75	



11e.	***Demonstrate the use of wheel or helm commands found in the Sea Scout Manual.*** (Typical Commands) Engine Commands Ahead Full Ahead Standard Ahead 2/3 Ahead 1/3 Ahead Slow All Stop Back Slow Back 1/3 Back 2/3 Back Full Steering Commands Come Right to Course xxx Come Left to Course xxx Steady as you Go Prepare to Tack Helm's Alee Prepare to Gybe Gybe Ho		
11f.	***Supervise and contribute to the cruise log for three days of cruising (one cruise or a combination of day cruises). Submit the cruise logs to your Skipper.*** Deck (cruise) Log Tips • Chronological record of the trip • Official document for maritime court in event of mishap • Typical Header contains date and destination • Things to document: – Navigation orders: Rudder and engine orders, tacks, heaving-to, anchoring, nav lights on/off – Entering/leaving a harbor – Significant waypoints – Interesting sightings – Weather changes – Incoming distress calls – Outgoing radio calls – Accidents and practice drills – Hourly position – Helm watch relief • Typical columns of info: – Time – Description • Typical Descriptions (use abbrev.) – Rudder and Engine Orders • R120 – Come right to course 120 • A1/3 – Ahead 1/3 (1000 rpm) • Z – All Stop (neutral, idle) • L120T STBD Tack – Came about left to 120 true on starboard tack – Passing Significant Waypoints • Passed York River Channel Buoy "R22" 100 yards to STBD • Entered Sarah's Creek at buoy R2 in route to York River Yacht Haven		
	12. Environment		
12.	Discuss with an adult leader the Federal Water Pollution Control Act as related to oil discharges. _____ _____ Explain what a "Discharge of Oil Prohibited" placard is and find it aboard your ship's vessels. _____ _____		

<table>
<tr><td></td><td>13. Cruising</td><td></td><td></td></tr>
<tr><td><u>13a.</u></td><td><u>Plan and participate in an overnight cruise in an approved craft under leadership that lasts a minimum of 36 hours.</u></td><td></td><td></td></tr>
<tr><td><u>13b.</u></td><td><u>While on the cruise, perform the duties of a helmsman for at least 30 minutes.</u></td><td></td><td></td></tr>
<tr><td></td><td>14. Boating Safety Course</td><td></td><td></td></tr>
<tr><td><u>14.</u></td><td><u>Successfully complete a boating safety course approved by the National Association of State Boating Law Administrators (NASBLA) offered by one of the following agencies: a state boating agency, the United States Power Squadrons, the United States Coast Guard Auxiliary, or other private or military education courses.</u></td><td></td><td></td></tr>
<tr><td></td><td>15. Service</td><td></td><td></td></tr>
<tr><td><u>15.</u></td><td><u>As an Apprentice, log at least 16 hours of work on ship equipment, projects, or activities other than regular ship meetings, parties, dances, or fun events.</u>

<u>The Scout must keep track of their own service hours.</u>

<table>
<tr><th><u>Date</u></th><th><u>Project</u></th><th><u>Hours</u></th><th><u>Initial</u></th></tr>
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<u>Note: Arrange for this work through the ship’s officers.</u></td><td></td><td></td></tr>
<tr><td></td><td>16. Electives—Do any three of the following:</td><td></td><td></td></tr>
<tr><td>16a.</td><td>Drill: Demonstrate your ability to execute commands in close-order drill.</td><td></td><td></td></tr>
<tr><td>16b.</td><td>Yacht Racing: Describe the procedures used in yacht racing and the signals used by the race committee to start a race. <u>Serve as a crew member in a race sailed under current International Sailing Federation Rules.</u></td><td></td><td></td></tr>
<tr><td><u>16c.</u></td><td><u>Sailing: In a cat-rigged or similar small vessel, demonstrate your ability to sail single-handedly a triangular course (leeward, windward, and reaching marks). Demonstrate beating, reaching, and running. A qualified sailing instructor should observe this requirement.</u></td><td></td><td></td></tr>
<tr><td>16d.</td><td>Ornamental Ropework: Make a three-strand Turk’s head and a three-strand monkey’s fist. Using either ornamental knot, make up a heaving line.</td><td></td><td></td></tr>
<tr><td><u>16e.</u></td><td><u>Engines: Perform routine maintenance on your ship’s propulsion system, including filter, spark plug, oil changes, proper fueling procedures and other routine maintenance tasks. Refer to operations manuals or your ship’s adult leaders for correct procedures and guidance.</u></td><td></td><td></td></tr>
<tr><td><u>16f.</u></td><td><u>USPS: Join a local Power Squadron as an Apprentice member.</u></td><td></td><td></td></tr>
<tr><td>16g.</td><td>Boatswain Call: Demonstrate your ability to use a boatswain’s pipe by making the following calls—word to be passed, boat call, veer, all hands, pipe down, and piping the side.</td><td></td><td></td></tr>
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