

**GREENOCK AND DISTRICT SCOUTS & GUIDES  
AMATEUR RADIO CLUB**



**COMMUNICATOR BADGE  
CUB SCOUTS  
Amateur Radio Workbook**



**NAME** \_\_\_\_\_

## **PREFACE**

This workbook has been created and provided as a resource for the Cub Scout Communicator Badge by the  
**Greenock and District Scouts and Guides Amateur Radio Club.**

The Club meets most Fridays at 7.00 p.m. during term time in the Radio Shack at Greenock and District Scout Headquarters, Finnart Street, Greenock, Inverclyde.

**We welcome visitors to the Club Radio Shack.**

Should you or your Group wish to visit, please make arrangements through your Leader.

**We can be contacted by email at: [mm0tsg@gmail.com](mailto:mm0tsg@gmail.com)**



Scan with your mobile phone to visit our website.

**<http://mm0tsg.wordpress.com>**



**In order to complete the Cub Scouts Communicator Badge, you must complete the following:**

1. **Get someone to give you directions or instructions to do something.**  
Check that you have understood. Then follow the directions or instructions.
2. Get someone you know to give you a call. Write down what they say, making sure that you have all the main details.
3. Show you can send emails and text messages. You could also show how to use a mobile phone or a tablet to send a message to someone.
4. Introduce yourself to an adult who helps out with your Pack. Talk to them for two minutes about your life, school or hobbies.
5. Choose three of these activities to do:
  - Report on a local event, either past or present. It could be written for something like a newsletter or recorded so people can listen to it.
  - Make contact with another Pack. Send them videos, letters or emails for whatever length of time your leader suggests.
  - Find out how people with a visual or hearing impairment communicate. You might learn about Braille, Makaton or British Sign Language. Learn a simple phrase in one of the ways you have learned.
  - Tell a story about an experience you've shared with your leaders and other Cubs. Make sure that you communicate clearly and that everyone is following the story.
  - Hold a simple conversation in another language.
  - **Write three simple messages using codes, ciphers, invisible ink or semaphore. Try to work out three similar messages given to you.**
  - Get an adult or Young Leader to give you a message. Remember it and repeat it back to them 10 minutes later.
  - **Pass a message to someone using amateur radio.**
  - Take part in Jamboree on the Air (JOTA) or Jamboree on the Internet (JOTI).

Our visit, as well as introducing you to the exciting hobby of Amateur Radio, can help you complete some of the tasks on this list. **You will:**

**Complete Clause 1, 'following instructions'.**

**Two parts of Clause 5, 'messages using codes and cyphers' and 'pass a message using Amateur Radio'.**

*You could subsequently complete Clause 5 by telling a story about your experience to your pack or by joining the Radio Group for JOTA/JOTI at Scout HQ on the third weekend in October.*

## CLAUSE 5

### 1. Morse code

Morse code is a series of short and long sounds sometimes called dots and dashes, but for learning Morse code it is better to say **dit** and **dah** because that is how they sound when we press the Morse key.



It is not as difficult to learn as it may seem. Try these exercises and see for yourself.

*The group leader will help you to fill in the blanks*

All the <b>dits</b> or dots		All the <b>dahs</b> or dashes	
	<b>Write the letter in this space</b>	<b>Write the correct number of 'dahs' in this space</b>	
.			<b>T</b>
..			<b>M</b>
...			<b>O</b>
....			

Some letters are opposites, so we have, for example

**A** .- and **N** - .

**Complete the following by filling in the opposites:**

<b>K</b>	-.-	<b>R</b>	
<b>G</b>	--.	<b>U</b>	
<b>W</b>	.--	<b>D</b>	
<b>P</b>	.-.	<b>X</b>	
<b>Q</b>	--.-	<b>F</b>	
<b>Y</b>	-.--	<b>L</b>	

Now that we know some of the letters let's make some words. All of these words use letters you have already learned (read down the column). **Next to each letter write the correct Morse code.** SOS has been included because although it is not an actual word, it is the international distress call.

<b>S</b>		<b>T</b>		<b>H</b>		<b>N</b>	
<b>O</b>		<b>U</b>		<b>O</b>		<b>I</b>	
<b>S</b>		<b>R</b>		<b>M</b>		<b>G</b>	
		<b>N</b>		<b>E</b>		<b>H</b>	
						<b>T</b>	

Now you choose a word to write, use only the letters you already know:

<b>Word</b>	<b>Morse Code</b>

Numbers are even easier to learn. They are all made up of dits (dots) and dahs (dashes) that add to five. For example **1 is .----**

**Look at the examples below and try to complete the rest.**

<b>1</b>	<b>.----</b>	<b>6</b>	<b>-....</b>
<b>2</b>	<b>..---</b>	<b>7</b>	
<b>3</b>		<b>8</b>	
<b>4</b>		<b>9</b>	
<b>5</b>	<b>.....</b>	<b>0</b>	<b>-----</b>

**Now write your name in this space**, if you haven't already learned all of the letters you need the group leader will help you. Put each letter in the first column and then write the Morse code in the second column.

Letters of your name	Morse Code

**Now write your age**, if you are 10 or over use a separate space for each number so that you can show the Morse code correctly.

	Morse Code
I	
a	
m	
<b>Write age in these spaces</b>	

This certifies that

\_\_\_\_\_

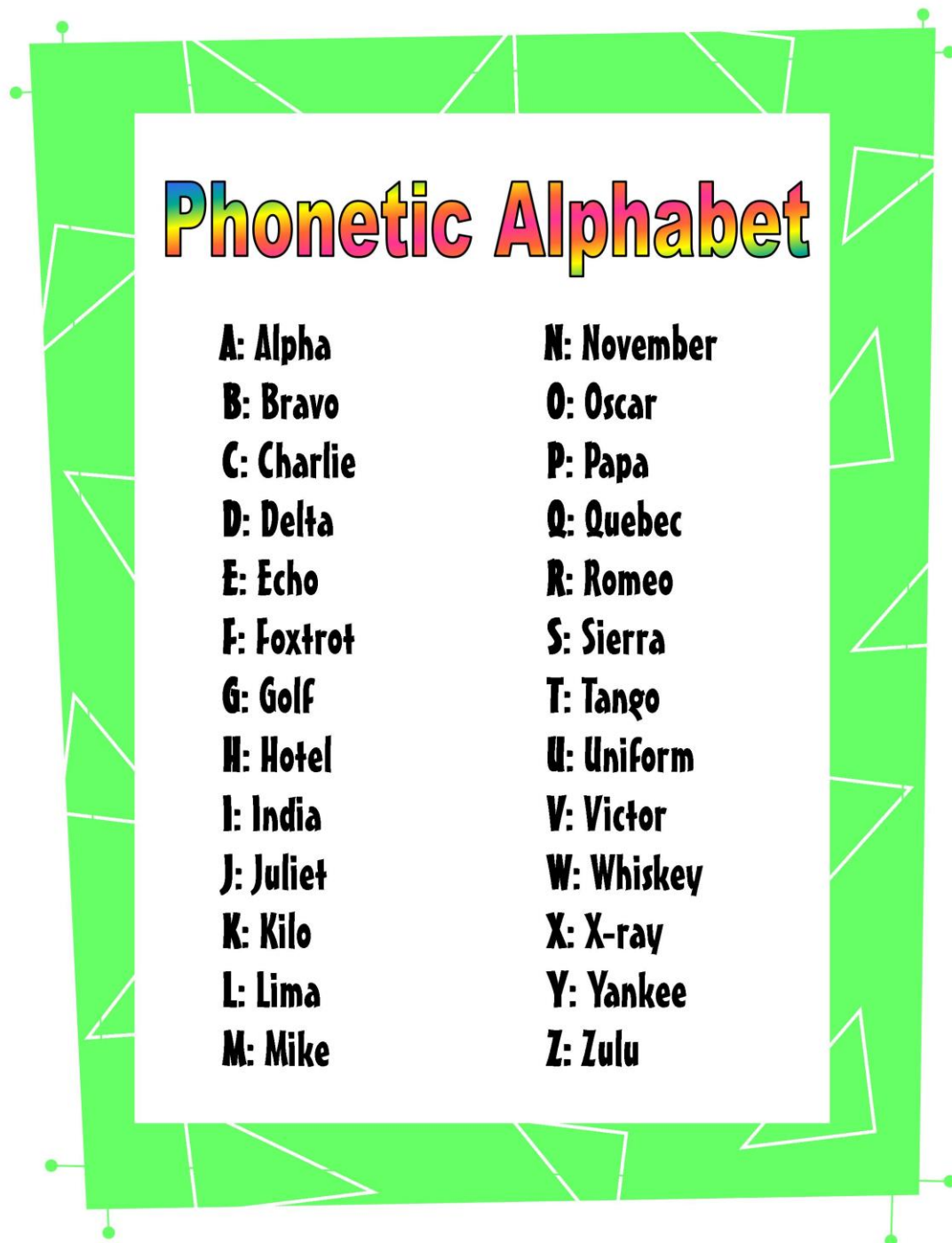
has successfully written and deciphered Morse code.

**Signed** \_\_\_\_\_

**Date** \_\_\_\_\_

## The Phonetic Alphabet

Although this is not a code, it is used to make sure that people receiving a message have correctly copied what has been sent by spelling out some letters using well known words.





*When you have written your message take it to one of the Radio Operators who will help you send it.*

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

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**Signed** \_\_\_\_\_ **Date** \_\_\_\_\_

## Jamboree on the Air (JOTA)

Jamboree on the Air (JOTA) takes place on the third full weekend in October. If you would like to visit the Scouts and Guides Amateur Radio Station during this time, please speak to your Cub Leader who will be able to arrange a visit for you either on your own or as part of a group.



*HOPE TO SEE YOU THERE*

*73, from the radio operators of MMOTSG*