

Scouts Communicator Badge



Name: _____

	Subject Chosen	Complete?
Part 1		
Part 2		
Part 3		

Choose 3 from below

1) Radio Communication

2) Communication Codes

3) Mobile & Internet

4) Translation

1) Radio Communication

a) Find and listen to some radio

Open an internet browser (Chrome/Firefox/Microsoft Edge)

Go to the website [Radio.Garden](https://www.radio.garden)

Search around the UK and find 10 radio stations from different parts of the country. On the next page, record the name of the radio station, listen to a little bit of each radio station and write down what sort of station it is – Music? what type? Talk Show? News?

[illegible]

b) Explain how radio signals work

Using the internet, research, in simple terms:

How do signals travel round the world? Is there a limit to how far they can go?

What is HF and VHF radio? What is it used for?

Explain this all back to an adult and see if you got it right. You could do this on paper, make a presentation, or however you like

c) Find a radio station

Think of radio station that you've heard of, if you know the frequency for it – great, if not look it up.

Show a leader that you can tune into this radio station on a normal radio.

d) Learn about the phonetic alphabet

The Phonetic alphabet is used to more clearly spell out words when it might be hard to hear, for example on the radio or on a phone the signal is bad.

There are 26 words for letters and 10 words for numbers, they are on the next page.

A - Alpha	J - Juliet	S - Sierra
B - Bravo	K - Kilo	T - Tango
C - Charlie	L - Lima	U - Uniform
D - Delta	M - Mike	V - Victor
E - Echo	N - November	W - Whiskey
F - Foxtrot	O - Oscar	X - X-ray
G - Golf	P - Papa	Y - Yankee
H - Hotel	Q - Quebec	Z - Zulu
I - India	R - Romeo	

Using the phonetic alphabet work out what the message below says:

Whisky, Echo, Lima, Charlie, Oscar, Mike, Echo – Tango, Oscar – Papa Golf – Sierra,
Charlie, Oscar, Uniform, Tango, Sierra.

Whisky, Echo – Alpha, Romeo, Echo – India, November – Bravo, Echo, Romeo, Kilo,
Sierra, Hotel, India, Romeo, Echo – Uniform, Kilo

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Come up with your own message:

Read it back to another scout or a leader using the phonetic alphabet, see if they can understand and if they get it right.

This alphabet is used by amateur radio users and by organisations such as the military to make sure that messages are received clearly.

2) Communication Codes

There are a number of ways of sending messages short distances, and some of these are still used today.

Two of these are morse code and semaphore.

Morse code is a way of sending letters and words using just dots and dashes, this can either be by light or sound. Every letter and number has a different code.

Morse code is still used on ships using lights to send signals.



Semaphore is a way of sending messages using flags. Every letter and number has a different signal.

Semaphore is still used on ships to send signals.



- a) **Using the morse code or semaphore, show that you can send a message at a speed of at least 5 words per minute.**

The next two pages have the alphabet and numbers translated into morse code and semaphore.

Decide which way you would like to communicate.

International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.

A ● ■
 B ■ ● ● ●
 C ■ ● ■ ●
 D ■ ● ●
 E ●
 F ● ● ■ ●
 G ■ ■ ●
 H ● ● ● ●
 I ● ●
 J ● ■ ■ ■
 K ■ ● ■
 L ● ■ ● ●
 M ■ ■
 N ■ ●
 O ■ ■ ■
 P ● ■ ■ ●
 Q ■ ■ ● ■
 R ● ■ ●
 S ● ● ●
 T ■

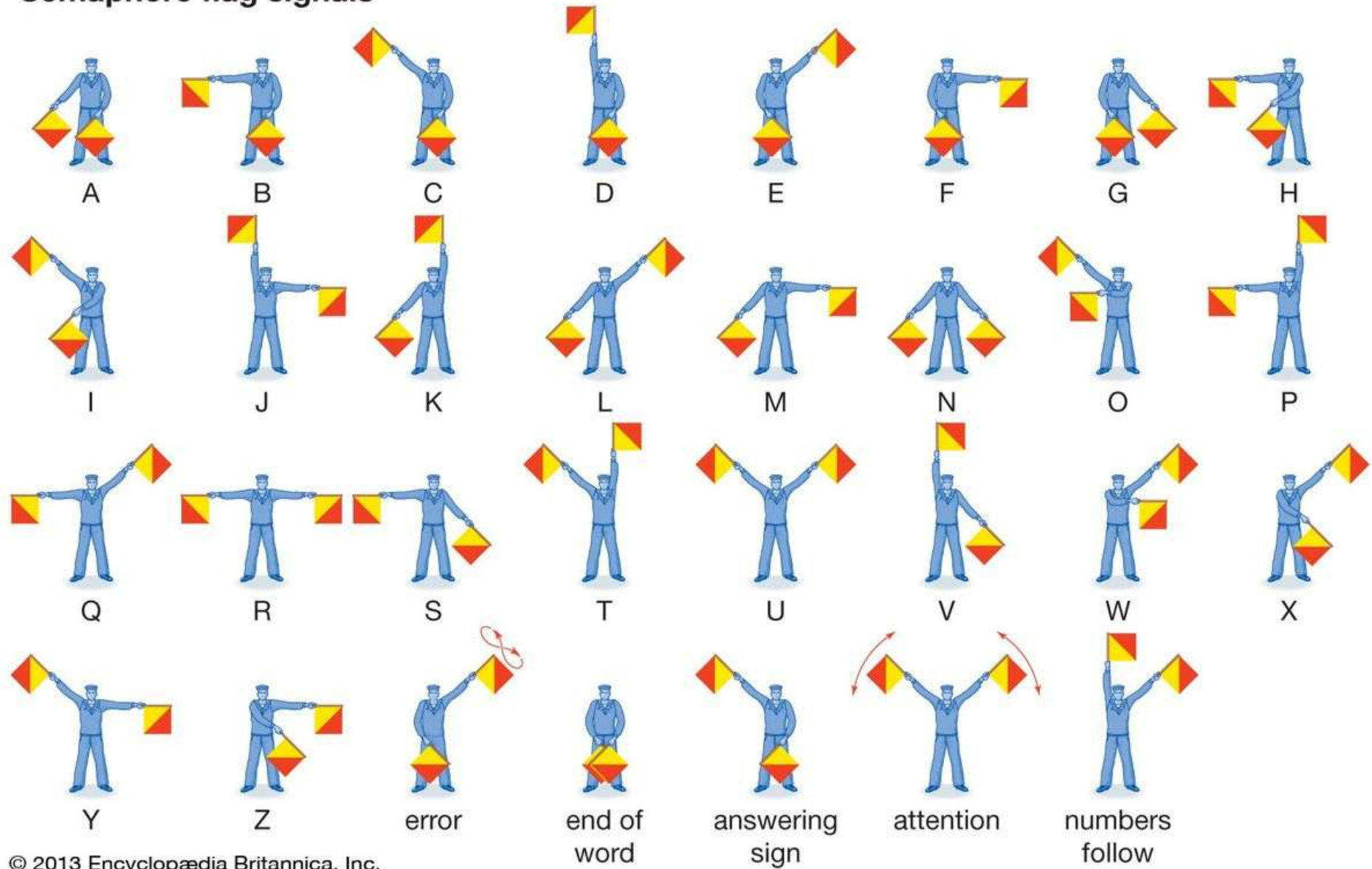
U ● ● ■
 V ● ● ● ■
 W ● ■ ■
 X ■ ● ● ■
 Y ■ ● ■ ■
 Z ■ ■ ● ●

1 ● ■ ■ ■ ■
 2 ● ● ■ ■ ■
 3 ● ● ● ■ ■
 4 ● ● ● ● ■
 5 ● ● ● ● ●
 6 ■ ● ● ● ●
 7 ■ ■ ● ● ●
 8 ■ ■ ■ ● ●
 9 ■ ■ ■ ■ ●
 0 ■ ■ ■ ■ ■

For example, 'Hi' would be:

4 dots a gap 2 dots
 H ● ● ● ● GAP I ● ●

Semaphore flag signals



Come up with a message, at least 10 words long and write it out below

On the next page translate it into either morse code or semaphore.

Then send this message to another scout or leader and get them to translate it, you may need to send the message more than once.

Did you get it right? Did they understand?

Translated message:

YOU DON'T NEED TO DO THE FOLLOWING 2 ACTIVITIES IF YOU ALREADY DID IT AS
PART OF COMMUNICATION CODES

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c) **Q Codes**

There are a lot of people who might pick up a transmission, for example morse code, how do they know who they are talking to?

The title for this is a good hint – look it up and explain what Q codes are to a leader

3) Mobile & Internet

a) Mobile safety

Explain to a leader how to safely use your mobile phone

b) Common terms

What do the following abbreviations mean:

SMS

MMS

3G/4G/5G

Bluetooth

iMessage

c) Video Messages

Record a video message on your phone, send it to a leader. The message should be sensible.

d) Texting

Think of a message, you can write it here if you want. It should be at least 25 words long.

Show that you can quickly and accurately text the entire message to a leader, the leader must watch you type it.

If you are not a good texter, practice first!

e) Chat abbreviations

Think of 10 common chat abbreviations (e.g. BRB)

Tell a leader what they are and what they mean. If you need to – look some up.

f) Share photos and videos.

Find/take some photos and videos of a scout activity, this could be JOTI.

How could you share them? Discuss this with a leader and share by at least 2 methods.

4) Translation

Not everyone is lucky enough to be able to hear. In the UK 1.2 million people have some form of hearing loss – that's almost 2% of the population.



There are 2 common forms of sign language in the UK which can be used to communicate with people who are deaf or hard of hearing.

These are:

British Sign Language

Makaton

a) Learn about BSL and Makaton

What are they?

What are the differences?

b) Pick one to learn better

Choose either BSL or Makaton and learn more about it, practice using it to speak.

Come up with a few sentences below to say something about scouting:

Translate these into either BSL or Makaton and practice them. Your sentences should be at least 5 minutes long when translated.

Make notes if it helps.

c) Communicate

Once you have learnt your messages, communicate and explain them to a leader.

Did they understand you? How do you think deaf people find communicating?