## The Internet

### A Network of Networks

<table>
<thead>
<tr>
<th>Slides</th>
<th>Suggested Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>What type of networks do the children have? Family, School, Local Friends, clubs etc</td>
</tr>
<tr>
<td>Picture of house</td>
<td>Let’s start by looking at our own Internet network in our home</td>
</tr>
<tr>
<td>Picture of connections inside the house</td>
<td>Internet comes in often via telephone wires or TV cable connection. Goes through our home router. Does anyone know where their router is or who installed it? Ask class what devices they use?</td>
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<tr>
<td>Picture of wire with arrows</td>
<td>Through the telephone line to your Internet Service Provider or ISP</td>
</tr>
<tr>
<td>Picture of Internet service provider office</td>
<td>Wire leaves the house and goes to the Internet service provider such as BT, Sky or TalkTalk.</td>
</tr>
<tr>
<td>ISP Router</td>
<td>Inside the ISP there is a much larger set of routers which send the Internet to lots of different networks. Point out large fibre cable going out to rest of Internet.</td>
</tr>
<tr>
<td>Picture of Fibre Optic Cable</td>
<td>These large bundles of cables go between continents under the sea</td>
</tr>
<tr>
<td>Half a globe</td>
<td>This pipe joins to other routers which connect to web servers around the world that deliver Google, youtube and Moshimonsters to name just a few</td>
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</table>

This is a great place to stop and run back and forwards between the home network and websites round the world. Start from a web request on an iPad and then chase it to Google and back. You can assess pupils learning with the **Home Internet Sticker Activity**.

| ISP Router | What other type of networks might be served by our ISP? |
| Group of houses | Your home may not be the only home using your ISP in your area |
| Picture of bank, factory, office and school | Each one of these examples will have their own network. Many will be quite different from our house network. |
| Picture of School | Let’s look at the network inside a school |
| Zoom to school network | The Internet comes into school via a router and is then shared out by a network switches and wireless access points. The main difference is with the server this computer controls who is allowed onto the network (username & passwords) and what they can use. |
| ISP Overview | Let’s go back to our ISP |
| Picture of Fibre Optic Cable | These large bundles of cables go between continents under the sea |
| Half a globe | This pipe joins to other routers which connect to web servers around the world that deliver Google, youtube and Moshimonsters to name just a few |