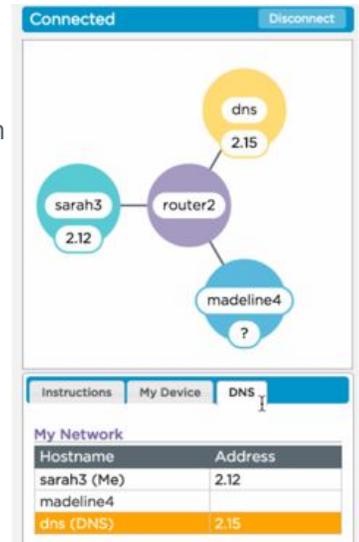Name(s)_____ Period _____ Date _____

Activity Guide - DNS Partner Questionnaire

Directions

Log on to Code Studio and join the Internet Simulator. You are going to interview/have a conversation with a classmate using only the Internet Simulator. We've created a list of interview questions (on the next page) and you should both jot down each other's responses.

HOWEVER….As you're working, if your teacher taps you and your partner, you both MUST disconnect and reconnect from the simulation. This is to simulate changing IP addresses. Even though your IP address will change, your hostname will stay the same, so you'll need to re-join a router and ask the DNS for your partner's new IP address in order to continue having your conversation!

Communicating with the DNS

To begin, click over to the "DNS" tab to see all the hostnames of people on the router. You will see the address of the DNS (always 15) but will not see an address for anyone else on the router.

The DNS server responds to a text protocol that will give you someone's IP address. Type the IP address of the DNS into the "To" field, then use the following protocol to retrieve the IP address.

> **The protocol is:** GET <hostnameOfPerson>
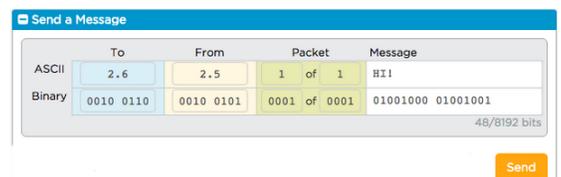>
> **For example:** GET baker3

	To	From	Packet	Message
ASCII	2.15	2.6	1 of 1	GET baker3
Binary	0010 1111	0010 0110	0001 0001	01000111 01000101 01010100 00100000 01100010 01100001 01101011 01100101 01110010 00110011

You can request the IP address of anyone in your class, even if they're connected to a different router!

	To	From	Packet	Message
ASCII	2.5	2.15	1 of 1	baker3:2.6
Binary	0010 0101	0010 1111	0001 0001	01100010 01100001 01101011 01100101 01110010 00110011 00111010 00110010 00101110 00110110

Once you've sent your request for the IP Address, the DNS will respond with the hostname and the IP address (shown on the left)

After the DNS has returned your partner's IP, you may contact them directly by typing the IP address into the "To" field, entering a message, and then pressing "send."

	To	From	Packet	Message
ASCII	2.6	2.5	1 of 1	HI!
Binary	0010 0110	0010 0101	0001 of 0001	01001000 01001001

48/8192 bits

Send

Interview questions

Partner's name:_____

1. Are you a morning person or a night person?

2. If you could have any superpower, what would it be and why?

3. If you won the lottery, what is the first thing you'd do with the money?

4. Which TV program would you never miss?

5. Do you like animals or have any pets?