Detecting Darwin
Activity 2: Piecing things together
http://www.darwinproject.ac.uk/learning/7-11/detecting-darwin

Suggested preparation
Presentation: Detecting Charles Darwin
http://www.darwinproject.ac.uk/learning/7-11/detecting-darwin

Film: What was Darwin like and why is he important?
Professor Jim Secord, Director of the Darwin Correspondence Project explains
http://www.darwinproject.ac.uk/learning/7-11/detecting-darwin

How long will activity take?  
• 35 mins

What do I need?  
• Pens
• A timer or bell
• Presentation slides to go through answers at the end of the session
• A £10 note or replica (with Darwin on)

Per group:
• A set of resources from each phase of Darwin’s life (numbered Stops 1-3)
• Question sheet
• Clipboard

Using clues from different stages of Darwin’s life, try to assemble facts about who he was and what he did.

What do I do?
1. In small groups, examine the different resources from the three phases of Darwin’s life and try to answer the questions.

2. When the bell rings, move on to the next set of sources. It doesn’t matter which order you study them in.
Detecting Darwin
Activity 2: Piecing things together question sheet

http://www.darwinproject.ac.uk/learning/7-11/detecting-darwin

Stop 1: Darwin as a young man and his great adventure
1. Which Cambridge College did Darwin attend?
2. Which creatures fascinated him as a student?
3. What was the name of the ship that Darwin sailed on? Where was his cabin?
4. What made him ill on the voyage and what did he enjoy?
5. Name 3 places he visited on the voyage.
6. Name something that he sent back home.

Stop 2: Family life and working from home
1. Name 2 reasons why Darwin considered not marrying and 2 reasons why he thought he should. What did he decide in the end?
2. How many children did he have and how many survived to adulthood? (check the dates)
3. Darwin carried out his scientific experiments at home. Name 2 places where he worked.
4. How did Darwin communicate with other scientists around the world?
5. Who was Joseph Hooker and what was his connection to Darwin?

Stop 3: Darwin’s work and legacy
1. What is the name of Darwin’s most famous book? When was it published?
2. What did Ernest Haeckel think of it?
3. How many scientific books or ‘volumes’ did he write?
4. When did he die? Where is he buried?
5. What is shown on the £10 note and why do you think Darwin is featured?
Oh, ship is a true pandemonium, is the cowherds who are

 Hammerting away above my head veritable devils.

 anything glorious that gives my stomach so much uneasiness.

 It is glorious because others do; it is however bitter cruelty to call

 this morning a glorious fresh trade wind is driving us along. I call

 one would feel it stewed in very warm melted butter.

 moonsight evening: but when I read it is I am sure just like what

 proportion all have enjoyed the delicious coolness of the

 This has been the first day that the heat has annoyed us. 8 in

 Darwin's diary: 13 February 1832
My dear Father

We sailed as you know on the 27th. of December & have been fortunate enough to have had from that time to the present a fair & moderate breeze: In the Bay of Biscay there was a long & continued swell & the misery I endured from sea-sickness is far far beyond what I ever guessed at...

From Teneriffe to St. Jago, the voyage was extremely pleasant.— I had a net astern the vessel, which caught great numbers of curious animals, & fully occupied my time in my cabin, & on deck the weather was so delightful, & clear, that the sky & water together made a picture.

I already have got to look at going to sea as a regular quiet place, like going back to home after staying away from it.— In short I find a ship a very comfortable house, with everything you want, & if it was not for sea-sickness the whole world would be sailors...

Believe me, my dear Father
Your most affectionate son

Charles Darwin
H.M.S. BEAGLE
MIDDLE SECTION FORE AND AFT
1832

1. Mr. Darwin’s Seat in Captain’s Cabin
2. Mr. Darwin’s Seat in Poop Cabin with Cot slung behind him
3. Mr. Darwin’s Chest of Drawers
4. Bookcase
5. Captain’s Skylight
6. Poop Ladders
7. Signal Flag Lockers
8. Gangways
9. After Companion
10. Brass nine-pounders, Captain’s private property
11. Six pounders
12. Hammock Nettings
13. Patent Windlass

The Poop Cabin
1. Bookcase
2. My Bunk
3. Chest of Drawers
4. My Cabinet
5. My seat
6. Microscope

Image courtesy of Simon Keynes

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The Beagle Voyage

Stop: 1

Plymouth
Cape Verde
Ascension Island
Galapagos Islands
Salvador
Rio de Janeiro
Montevideo
Valparaiso
Callao
Chile
Straits of Magellan
Cape of Good Hope
King George Sound
Sydney
Hobart
Stop: 1
Some things that Darwin collected
The Wedgwood and Darwin Families

Robert Waring Darwin = Susannah Wedgwood = Josiah Wedgwood II = Elizabeth (Bessy) Allen
1766–1848 1765–1817 1769–1843 1764–1846

Marianne 1798–1858
Susan Elizabeth 1803–66
Erasmus Alvey 1804–81

Caroline Sarah = Josiah III (Jos) 1800–88 1795–1880

Charles Robert = Emma 1809–82 1808–96

William Erasmus 1839–1914
Anne Elizabeth 1841–51
Mary Eleanor Sept.–Oct. 1842
Henrietta Emma (Etty) 1843–1927
George Howard 1845–1912
Elizabeth (Bessy) 1847–1926
Francis (Frank) 1848–1925
Leonard 1850–1943
Horace 1851–1928
Charles Waring 1856–8

Sarah Elizabeth (Elizabeth) 1793–1880
Mary Anne 1796–8
Charlotte 1797–1862
Henry Allen (Harry) 1799–1885
Francis (Frank) 1800–88
Hensleigh 1803–91
Frances (Fanny) 1806–32
Joseph Hooker

Joseph Hooker was a botanist, plant hunter and he became director of the Botanical Gardens at Kew. He went on many expeditions including to the Himalayas and even a trip to Antarctica – looking for plants!

When Darwin returned from his round the world voyage he sent some of the plants that he had brought back to Joseph Hooker to help him indentify them.

They became lifelong friends. Darwin exchanged 1,400 letters with Joseph Hooker. They helped each other carry out research by sending letters about experiments that they had done and new information that they had found.

They shared personal stories and sadness too, as both men experienced the death of a young daughter.
My dear Darwin,

...— All I can wish you is, that you may experience as great content in the marriage state as I have done myself—& all the advice, which I need not give you, is, to remember that as you take your wife for better for worse, be careful to value the better & care nothing for the worse— Of course it is impossible for a lover to suppose for an instant that there can be any worse in the matter, but it is the prudent part of a husband, to provide that there shall be none—...

But I am afraid you will think I am writing a sermon— Only take it in good part, & believe that I most heartily wish you all joy & prosperity— Is there a chance of your coming here this Xmas Mrs H is anxious to know & bids me ask you—

Yrs ever affectly
J. S. Henslow
My dear Darwin,

This day 15 yrs ago I set out on that start which, as I feared, my penicidium & health that you are about to enter. I have been busy in urging you to come sooner, but I am sure you will see nothing save pleasure in your happiness from having married one more specimen of my countrymen & the many you have entrusted. All I can wish you is that you may experience as much content in the marriage as I have done myself & all who have known you in this way, & I shall always feel it as my duty to remain with you in all your happinesses, as I am now doing.

Darwin Correspondence Project/Cambridge University Library (CC BY-ND 2.0)
Down Farnborough Kent
Monday Morning

My dear Hooker

Your drawing is quite beautiful; I cannot thank you enough, & I feel, as I before said guilty—your good nature is as wonderful as mesmerism.— I have been reading heaps of papers on Cirripedia, & your drawing is clearer than almost any of them.

The more I read, the more singular does our little fellow appear, & as you say, looking at its natural size, a microscope is a most wonderful instrument. How different would the drawing have been, if I had employed an artist! not to mention the invaluable assistance of having my loose observations confirmed, & the several points observed only by you.— I shall of course state this in the beginning of my paper, & when I have not seen the thing, give it on your authority...

Ever yours
My dear Hooker,
C. Darwin
Dear Sir,

Some drawings are quite beautiful; I cannot thank you enough. I feel as if I were writing to my friend, and your wording is so wonderful. I have been looking through your papers, and I think that your drawing is clear and similar to any of them. I hope you will be able to see them. I am in a hurry to understand some of the points mentioned. I am not sure if you have seen them, but I have not yet been able to see them. I hope they will be shown to various people, and I thank you cordially.

C. Darwin
Marry, Not Marry?

This is the Question

Marry

Children—(if it Please God) — Constant companion, (& friend in old age) who will feel interested in one, — object to be beloved & played with. — better than a dog anyhow. — Home, & someone to take care of house — Charms of music & female chit-chat. — These things good for one’s health. — but terrible loss of time. —

My God, it is intolerable to think of spending ones whole life, like a neuter bee, working, working, & nothing after all. — No, no won’t do. — Imagine living all one’s day solitarily in smoky dirty London House. — Only picture to yourself a nice soft wife on a sofa With good fire, & books & music perhaps — Compare this vision with the dingy reality of Grt. Marlbro’ St.

Marry—Mary—Marry Q.E.D.

Not Marry

Freedom to go where one liked — choice of Society & little of it. — Conversation of clever men at clubs —

Not forced to visit relatives, & to bend in every trifle. — to have the expense & anxiety of children — perhaps quarelling —

Loss of time. — cannot read in the Evenings — fatness & idleness —

Anxiety & responsibility — less money for books &c — if many children forced to gain one’s bread. — (But then it is very bad for ones health to work too much)

Perhaps my wife wont like London; then the sentence is banishment & degradation into indolent, idle fool —
THE ORIGIN OF SPECIES
BY MEANS OF NATURAL SELECTION
ON THE \nPRINCIPLES OF TRAITS OF \nFAVORITIZED \nRACES IN THE \nSPERMOGICAL \nFACULTIES.

JOHN MURRAY, \nALBEMARLE STREET.
LONDON.
1859.

DEAR
G. G. BRANDLEY, D.D.
(Enthroned by Dean's Yard).

JERUSALEM CHAMBER.

Submit the dinner at Eleven o'clock to the \nAr 1 o'clock precisely.

Wednesday, April 26th, 1882.

WESTMINSTER ABBEY,

FUNERAL OF MR. DARWIN.

DIED 19 April 1882
BORN 12 February 1809
CHARLES ROBERT DARWIN

N.B. No person will be admitted except in mourning.

P.S. The service will commence at half-past Three o'clock.

P.S. The service will commence at half-past Three o'clock.
Most honoured Sir

...Of all the books I have ever read, not a single one has come even close to making such an overpowering and lasting impression on me, as your theory of the evolution of species. In your book I found all at once the harmonious solution of all the fundamental problems that I had continually tried to solve ever since I had come to know nature as she really is. Since then your theory—I can say so without exaggerating—has occupied my mind every day most pressingly, and whatever I investigate in the life of humans, animals or plants, your theory of descent always offers me a harmonious solution to all problems, however knotty...

Hoping, dear Sir, that your health will improve and that it will allow you for many years yet to continue the battle for truth and against human prejudice, I remain with the most sincere esteem,

Yours truly devoted
Ernst Haeckel
Liebster Herr Darwin,


Im Anschluss an diese Arbeit habe ich mich mit der Theorie der Evolution beschäftigt, die ich in meinen Büchern dargestellt habe. Ich freue mich auf Ihre Meinung zu dieser Thematik.

Mit freundlichen Grüßen,

Ernst Haeckel
Extracts (highlighted red opposite) from The Times Obituary for Charles Robert Darwin
The Times, Friday, Apr 21, 1882

...The announcement of the death of Charles Darwin flashes over the face of the earth whose secrets he has done more than any other to reveal...

Fifteen volumes lie before us and nearly as many memoirs large and small, the product of 45 years' work—a product which, in quantity, would do credit to the most robust constitution. But when we consider Mr. Darwin's always feeble health and his deliberately slow method of work, never hasting but rarely resting, the result seems marvellous...

The Beagle sailed from England December 27, 1831, and returned October 28, 1836, having thus been absent nearly five years. In more ways than one these five years were the most eventful of Mr. Darwin's life. During these five years the Beagle circumnavigated the world, and it's not too much to say that singlehanded, Mr. Darwin during the voyage did more for natural history in all its varied departments than any expedition has done since; much more when we consider the momentous results that followed...

His personal influence on young scientific men can with difficulty be calculated; his simple readiness to listen and suggest and help has won the gratitude of many an aspiring observer.

Since he took up his residence in at Down, Mr. Darwin's life has been marked mainly by the successive publication of those works which have revolutionized modern thought. In 1859 was published what may be regarded as the most momentous of all his works, "The Origin of Species by means of Natural Selection."

No one, we are sure, would be more surprised than the author himself at the results which followed. But all this has long passed. The work, slowly at first, but with increasing rapidity made its way to general acceptance...

It goes without saying that the honours and medals were showered upon Mr. Darwin by learned societies all the world over...