In Orthograffiti (WW7$217), Richard Lederer showed that a single sound can be demonstrated by many different letters. The sounds which concern us here are the long vowels, specifically the sounds of the 5 major vowels, A,E,I,O and U as they are pronounced in the reading of the alphabet. The sound symbols are those of the Phonetics List of the Oxford English Dictionary, Second Edition. However, I include a further parameter. The long vowel sound must either be preceded, or succeeded, by the short 's' sound. The latter was chosen because it comes in a range of letter combinations. It was not chosen so that plurals could be used. In fact, most s-ending plurals end with the short 'z' sound!

Many of the variant forms in the OED may also qualify as examples of the genres below but have not been included because they are not phoneticized individually. Letters which immediately follow the required sound, and which are obviously silent letters, are not included as part of that sound. Thus the -igh of 'sigh' is deemed not to be a variety of the long I sound.

<table>
<thead>
<tr>
<th>Long 'A' sound followed by short 's' sound</th>
<th>Best examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC ace, acyl, face, glacier</td>
<td>AC plaice</td>
</tr>
<tr>
<td>AIS waist, dais</td>
<td>AIS bass</td>
</tr>
<tr>
<td>AS asylic, basic, casein, wight</td>
<td>AS bass</td>
</tr>
<tr>
<td>AYC Jaycee (US coll. - a member of the junior chamber)</td>
<td>AYS playcome, Malaysian</td>
</tr>
<tr>
<td>EC prekis</td>
<td>EC keeshond (a variety of the spitz dog)</td>
</tr>
<tr>
<td>EIS obligation, bra Evelis (a barbecues), milliEis (coin)</td>
<td>EIS mcca, Kcro (a Pueblo Indian people)</td>
</tr>
<tr>
<td>EYS greystone, geysir</td>
<td>EYS Seychelles (the name of 2 villages on the upper Rhône)</td>
</tr>
<tr>
<td>UES roquetsite (a sulphide of copper and indium CuInS2)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Short 's' sound followed by long 'A' sound</th>
<th>Best examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE accquia (a canal for irrigation), fliangé</td>
<td>CE flangée</td>
</tr>
<tr>
<td>SA sacred, dispensation</td>
<td>SA gaster (a meadow associated with a dwelling)</td>
</tr>
<tr>
<td>SA1 saint, sailor</td>
<td>SAY saying, calliagya (a valuable Peruvian bark), soothing</td>
</tr>
<tr>
<td>SE Seder (Passover service), Luigento (a Shoshone Indian people)</td>
<td>SEI signorial, scene (a fishing net), absent, nissei, sassy</td>
</tr>
<tr>
<td>SI shingose (a high explosive), séance</td>
<td>SEY Seychelles, causey (a dam)</td>
</tr>
<tr>
<td>SSAY essyette</td>
<td>SSA decussate, glissade, cessation</td>
</tr>
<tr>
<td>SSEH medresseh (a Muslim college)</td>
<td>SSEI maged (a billiards term), chausé (shod)</td>
</tr>
<tr>
<td>S2AI szaibelyite (a hydrous borate of magnesium)</td>
<td>GZ piazza (var. 'piazza', an Italian public square)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long 'E' sound followed by short 's' sound</th>
<th>Best examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEC accedial, faces</td>
<td>AEC aestivation, quaestor</td>
</tr>
<tr>
<td>EAC peace</td>
<td>EAC Easter, yeast, grease, increase</td>
</tr>
<tr>
<td>EC ecize (re. plants - to colonize), peritheciun,</td>
<td>EEC fleece, Greece</td>
</tr>
<tr>
<td>EES esseome (attractive to the eye), teescou (Dhak flowers)</td>
<td>EIS ess-blink, leister (a fishing spear)</td>
</tr>
<tr>
<td>ES Esau, thegus, obese</td>
<td>EYS keystone</td>
</tr>
<tr>
<td>IC icle, poligae</td>
<td>IEC piece</td>
</tr>
<tr>
<td>IES pieckite (variety pine), Schoenflies (mathemagician)</td>
<td>IIS link (a luminous appearance on the horizon)</td>
</tr>
<tr>
<td>ISS pelisse (a fur garment), camis (a Muslim shirt)</td>
<td>OEC oecist (the founder of an ancient Greek colony), dioecy</td>
</tr>
<tr>
<td>OES oestrin</td>
<td>IX Dix (the lowest trump in Bezique and other card games)</td>
</tr>
</tbody>
</table>
short 's' sound followed by long 'E' sound..... (si)

C C - the letter C
CAE caenozoic, glycaemia, muscae (eye floaters)
CE cedar, ceanothus, ibices, paneage, circe
CEA cease, conceal
CEE ceefax, digees, procued, seducee
CEEI ceiling, perceive, conceit, caducei
CEY ceylonite (a fernigious variety of spinel from Ceylon)
CI cinematheque, glycine
CIE coeleterate, acoelomate
CIEY coelenterate, acoelomate
CY cypres (in Law, means 'as near as practicable')
SE A Sagesh limit, heartsease, Chelsea
SAA sagenite, vibrisae
SEI seif (old type of eye-wash), casein, disseisee
SEY Seymouria (a fossil tetrapod), senayvite (Pb,Sb5),
SI glith, argine, Farci
SEE Tennessen, Ulisses, esse
SAE saepe, ellipseg, paradigian, Barotse
SAAE Saffron, Paradox, bar ytry
SEEH seethe, aniseed, foresee
SEI seif (old type of eye-wash), casein, disseisee
SEY Seymouria (a fossil tetrapod), senayvite (Pb,Sb5),
SSEA thalassaemia, vibrisae
SSEE sections, assessses
SAE saepe, ellipseg, paradigian, Barotse
SAEJ Casagiver (cassette recorder/radio)
SI assige (parallel beds of rock agreeing in their organic remains)
SIEI assige (parallel beds of rock agreeing in their organic remains)
SSEI assige, casie (a shrub with yellow flowers)
SY Sylow (P.L. Sylow = a Norwegian mathematician)
ZE Saorstat Eirann (Irish Free State)
ZEE Sze Yap (a area in Guangdong Province in China )

long 'I' sound followed by short 's' sound..... (ais)

AES maestro
AIS nigra
AISS quaiss kitir (means 'Very good!')
EIS cygger
EISS Meissen, gaiss
EYES eyester
EYS eyester
IIS gipas (old 'price')
ISS gipas (old 'price')
SSEI assigee, casie (a shrub with yellow flowers)
SOCEI seif (old type of eye-wash), casein, disseisee
SSEY Seymouria (a fossil tetrapod), senayvite (Pb,Sb5),
SSEE sections, assessses
SSEA thalassaemia, vibrisae
SSEE sections, assessses
SIEI assigee, casie (a shrub with yellow flowers)
SYY Sylow (P.L. Sylow = a Norwegian mathematician)
SY Sylow (P.L. Sylow = a Norwegian mathematician)
SYES Yssap (the 'Yacht' Game)

short 's' sound followed by long 'I' sound..... (ais)

CEI seihia (silk-cotton tree of West Indies), prisee
CI cipher, pricacy, fuci
\( (a\) mineral)
CY cycle, ooyte
SAAI saaidam (land for flood water enclosed by earthen walls)
SAAE saeja dignatio (savage indignation)
SAI saigan, goisain (a Hindu religious mendicant), bonspai
SAY gayonara, sayaid
SCI sciatica, dissige, ethnoscience
SCY sciarte, hyogyvemia (a vegetable alkali)
SEI seicmic
SI siphon, Siamese, inside, quasi
SIEI siphon, Siamese, inside, quasi
SSEI goisain (see goasain = SAI)
SSI missile, assige
SSY assytement (compensation)
SY synovial, forsythia, prophesy
SZI islandite, hydrosulphate of calcium and potassium
ZI quartzite (a compact, granular, mainly quartz, rock)

long 'O' sound followed by short 's' sound..... (acs)

AUSS hausse (type of breech site for a cannon), Sausseuran
OAS oast, boast, Milquetost (an AEIOU word)
OES oeskin, wogose
OPS ethnopsychoology
OSS osster (sp. of sturgeon), engrossing, disgross
OWC owwwe (a windlass for drawing up ore), Snowcem
OWS bowssprit, throwster (one who twists silk into thread)
EAUC Peaucellier cell (named after its inventor Lieut. Peucellier)
OC ocellus, grogery, logi
OHS oh-so, moghite (oxide of iron and titanium)
OS osmosis, ulvogepin(a mineral), thorcanine beasts)
OUS oseania (the Compositae), klipkouS(abalooe)
OWES Lowestoft (in Suffolk, UK)
OZ corozo (a South American tree allied to the palms)
short ‘s’ sound followed by long ‘O’ sound....(sao)

CAO curacao
SAU Sauerne
SEW sewn
SOA soap
SOW soap
SSO rissole, associate, expresso
SSOW cursorrow (a turkey-like bird)

CEO once-over
SCEAU Sceaux (a town near Paris)
SO Soviet, sole, disobey, torso
SOU soul
SSEAU Rousseau, trousseau
SSOH Mendelssohn
ZO Zoque (a group of Central-American Indian languages), quartzose, Tzotzil (a member of an Indian people in parts of S. Mexico), scherzo

long ‘U’ sound followed by short ‘s’ sound....(ju:s)

EUC eucyclic (a Botanical term), deuce
EUS Euston, eustacy (a uniform change of sea level worldwide).
EWS Newspeak
UIS nuisance
YUS Yusufzai (a Pathan tribal group inhabiting the N-W Frontier Province of Pakistan)

short ‘s’ sound followed by long ‘U’ sound....(sju:)

CEU pharmacetic
SEU proseucha (a place of prayer in ancient times)
SU assume, pari passu (in Law, means ‘equally’)

Pharmacetic (an English dukedom)
proseucha (formerly, an attendant at a meal)
assume, pari passu (in Law, means ‘equally’)
suberic (pertaining to cork), capsule

Whole Word makes the sound

The long vowel - short ‘s’ (or vv) sound may be the whole word. Thus the short ‘s’ - long E sound is represented by sea and see, the latter also meaning ‘sea’. The short ‘s’ - long U sound is, similarly, represented by sew and sue, both meaning ‘of a cow: dry of milk’. In both these cases the words are synonymous.

Homophonic examples, in which the meaning of the words is different, can also be found:

Long A say - sew (a fish)
Long E g(reece) - g(reece) (see * below), peace - piece
Long O sew - so - soh - sow - seu (a bucket-like wine cooler)

Homophones

In these non-whole word homophonic examples, the difference in spelling of the words is confined to the long vowel-short ‘s’ (or vv) sound sequence, the other letters remaining the same.

Long A place - place
Long E grease - Greece - greece (see * below), peace - piece
Long I Reisner (German mist in wood) - Reissner (German anatomist)
Long O host - host (a cough)

* there are 14 variants of ‘grece’ (a stairway) in the OED, all of which would seem to have the same pronunciation but, without the phonetic entries, there is always an element of uncertainty.

Synonyms

It is rare for the long vowel-short ‘s’ sound to be found in homophones which are also synonyms:

Long I reins = raiz (the captain of a boat or vessel)
Two in One
In each of these words, the same long vowel - short 's (or vv)' sound occurs twice. The 2 groups of letters may be anywhere in the word:
(a) The letters concerned are the same
Long I sinusitis, cimicine
Long O mesosome
(b) The letters concerned are different
Long E aesthesia (capacity for feeling and sensation)
Long I metempsychosize, cyanicde, cytosine (in DNA)
Long O adipocellugse, biocoenosis, monopsychosis

Two in One Reversed
In these words, the same long vowel sound appears as both the long vowel - short 's' sound and its reverse, the short 's' - long vowel sound.
(a) The letters concerned are the same
Long E Sinarquista
Long I isoclaste
Long O isodose
(b) The letters concerned are different
Long E coenaesthesis (the vital sense)
Long I cytolysin, polyisocyanate
Long O dissocioscope

Shared letters
(a) The long vowel sound is preceded and succeeded by a short 's' sound
Long A Sayssel (the name of 2 villages on the upper Rhone), saysl
Long E deceased, sarritis
Long I incisor, syce (an Indian horse groom)
Long O saussurite (variety of the mineral zoisite), society
Long U disguise
(b) The short 's' sound is preceded and succeeded by the same long vowel sound
Long A staysail
Long E reseat, thecae, faeces, meseems, resieze
Long I dicyanide
Long O virtuoso

Special Words
Words may satisfy more than one of the above categories. Here are 2 examples:
PLEISTOSEIST (pleistoseists are lines enclosing earthquake areas)...the 'ei' in each case is pronounced as a Long I
Two in One - letters the same (pleistoseist).
Two in One reversed - letters the same (pleistoseist),
Shared letters - Long I sound preceded and succeeded by a short 's' sound (pleistoseist).
DECISIS (stare decisis - in Law; to be bound by precedents)...the 2 letters 'i' are each pronounced as a Long E
Two in One - letters the same (decisis)
Two in One reversed - letters the same (decisis)
Shared letters - Long E sound preceded and succeeded by a short 's' sound (decisis and decisis)
- short 's' sound preceded and succeeded by Long E sound (decisis)