## Celestra cheatsheet – v5.6.6 – <a href="https://github.com/Serrin/Celestra/">https://github.com/Serrin/Celestra/</a>

The celestra and/or the CEL objects contain these functions, except the polyfills. Example: CEL.qsa("p");

| The celestra and/or the CEL objection Core API                            | DOM API   | Type checking API   |
|---|---|---|
| 0.120 0.12  |   | 11 3  |
| BASE16; BASE32; BASE36; BASE58; BASE62; WORDSAFEALPHABET;                 | <pre>qsa (<selector>[,context]).forEach(<cb>);</cb></selector></pre>        | isMap( <value>); and isWeakMap(<v>);</v></value>            |
| ,   | <pre>qs(<selector>[,context]);</selector></pre>                             | isSet( <value>); and isWeakSet(<v>);</v></value>            |
| <pre>javaHash(<data>[,hexa=false]);</data></pre>                          | <pre>domReady(<callback>);</callback></pre>                                 | isNumber( <v>); and isNumeric(<v>);</v></v>                 |
| b64Encode( <string>); b64Decode(<string>);</string></string>              | <pre>domClear();</pre>  | <pre>isFloat(<val>); and isBigInt(<v>);</v></val></pre>     |
|   | <pre>domCreate(<type>[,properties[,innerHTML]]);</type></pre>               | <pre>isString(<v>); and isChar(<val>);</val></v></pre>      |
| <pre>sizeIn(<object>);</object></pre>                                     | <pre>domCreate(<element descriptive="" object="">);</element></pre>         | <pre>isRegexp(<v>); and isSymbol(<v>);</v></v></pre>        |
| <pre>popIn(<obj>, <pre>, forIn(<obj>, <cb>);</cb></obj></pre></obj></pre> | <pre>domToElement(<htmlstring>);</htmlstring></pre>                         | <pre>isElement(<v>); and isObject(<v>);</v></v></pre>       |
| <pre>filterIn(<object>,<callback>);</callback></object></pre>             | <pre>domGetCSS(<element>[,property]);</element></pre>                       | <pre>isDate(<value>);</value></pre>                         |
| <pre>delay + sleep(<ms>).then(<callback>);</callback></ms></pre>          | <pre>domSetCSS(<element>,<pre>,<value>);</value></pre></element></pre>      | <pre>isDataView(<value>);</value></pre>                     |
| <pre>randomBoolean(); and randomUUIDv7();</pre>                           | <pre>domSetCSS(<element>,<pre>,<pre>,</pre>;</pre></element></pre>          | <pre>isBoolean(<value>);</value></pre>                      |
| <pre>timestampID([size=21[,alphabet=BASE58]]);</pre>                      | <pre>domFadeIn(<element>[,duration[,display]]);</element></pre>             | isNull( <value>);</value>                                   |
| nanoid([size=21[,alphabet="A-Za-z0-9-                                     | <pre>domFadeOut(<element>[,duration]);</element></pre>                      | <pre>isUndefined(<value>);</value></pre>                    |
| _"]]);  | <pre>domFadeToggle(<elem.>[,duration[,display]]);</elem.></pre>             | <pre>isNullOrUndefined(<v>); isNil(<v>);</v></v></pre>      |
| <pre>getUrlVars([str=location.search]);</pre>                             | <pre>domShow(<element>[,display]);</element></pre>                          | <pre>isPlainObject(<value>);</value></pre>                  |
| obj2string( <object>);</object>   | <pre>domHide(<element>);</element></pre>                                    | <pre>isTruthy(<val>); + isFalsy(<val>);</val></val></pre>   |
| <pre>classof(<variable>[,type[,throw=false]]);</variable></pre>           | <pre>domToggle(<element>[,display]);</element></pre>                        | <pre>isFunction(<v>); + isCallable(<v>);</v></v></pre>      |
| <pre>getType(<variable>[,type[,throw=false]]);</variable></pre>           | <pre>domIsHidden(<element>);</element></pre>                                | <pre>isConstructorFn(<v>); isClass(<v>);</v></v></pre>      |
| <pre>bind(<fn>,<context>); and unBind(<fn>);</fn></context></fn></pre>    | <pre>domScrollToTop();</pre>  | isGeneratorFn( <value>);</value>                            |
| <pre>constant(<value>); and identity(<value>);</value></value></pre>      | <pre>domScrollToBottom();</pre>   | isAsyncGeneratorFn( <value>);</value>                       |
| noop(); and T(); and F();   | <pre>domScrollToElement(<element>[,top=true]);</element></pre>              | isAsyncFn( <value>);</value>                                |
| <pre>assertEq(<msg>, <v1>, <v2>[, strict=true]);</v2></v1></msg></pre>    | <pre>domSiblings(<element>);</element></pre>                                | <pre>isArraylike(<value>);</value></pre>                    |
| <pre>assertNotEq(<m>,<v1>,<v2>[,strict=true]);</v2></v1></m></pre>        | <pre>domSiblingsPrev(<element>);</element></pre>                            | <pre>isTypedArray(<value>);</value></pre>                   |
| <pre>assertTrue(<message>, <value>);</value></message></pre>              | <pre>domSiblingsLeft(<element>);</element></pre>                            | <pre>isArrayBuffer(<value>);</value></pre>                  |
| assertFalse( <message>,<value>);</value></message>                        | <pre>domSiblingsNext(<element>);</element></pre>                            | isPrimitive( <value>);</value>                              |
| noConflict(); and VERSION;  | <pre>domSiblingsRight (<element>);</element></pre>                          | <pre>isPromise(<value>);</value></pre>                      |
| String API  | domGetCSSVar( <name>);</name>   | <pre>isIterator(<value>);</value></pre>                     |
| -   | domSetCSSVar( <name>,<value>);</value></name>                               | <pre>isIterable(<value>);</value></pre>                     |
| <pre>strPropercase(<str>); strTitlecase(<s>);</s></str></pre>             | <pre>importScript(<script1>[,scriptN]);</script1></pre>                     | <pre>isEmptyObject(<value>);</value></pre>                  |
| <pre>strCapitalize(<str>); + strTruncate(<s>);</s></str></pre>            | <pre>importStyle(<style1>[,styleN]);</style1></pre>                         | <pre>isEmptyArray(<value>);</value></pre>                   |
| <pre>strUpFirst(<str>); + strDownFirst(<str>);</str></str></pre>          | <pre>setFullscreenOn(<selector> or <element>);</element></selector></pre>   | <pre>isEmptyMap(<v>); + isEmptySet(<v>);</v></v></pre>      |
| <pre>strReverse(<s>); + strCodePoints(<s>);</s></s></pre>                 | <pre>setFullscreenOff();</pre>  | <pre>isEmptyIterator(<value>);</value></pre>                |
| <pre>strFromCodePoints(<iterator>);</iterator></pre>                      | <pre>getFullscreen();</pre>   | isSameObject( <object1>,<object2>);</object2></object1>     |
| <pre>strAt(<string>,<index>[,newChar]);</index></string></pre>            | <pre>form2array(<form>); and form2string(<form>);</form></form></pre>       | isSameArray( <array1>,<array2>);</array2></array1>          |
| <pre>strSplice(<str>,<index>,<count>[,add]);</count></index></str></pre>  | <pre>getDoNotTrack();</pre>   | isSameMap( <map1>,<map2>);</map2></map1>                    |
| <pre>strHTMLRemoveTags(<string>);</string></pre>                          | <pre>getLocation(<success>[,error]);</success></pre>                        | isSameSet( <set1>,<set2>);</set2></set1>                    |
| <pre>strHTMLEscape(<s>); strHTMLUnEscape(<s>);</s></s></pre>              | <pre>createFile(<filename>, <content>[, dType]);</content></filename></pre> | <pre>isSameIterator(<iter1>,<iter2>);</iter2></iter1></pre> |
|   | ,                                     | , , , , , , , , , , , , , , , , , ,                         |

```
Collections API
                                                                                                      Polyfills
                                                 forEach(<iterator>,<callback>);
                                                 map(<iterator>,<callback>);
arrayCreate([length=0]);
                                                                                       Array.fromAsync();
                                                 enumerate(<iterator>[,offset=0]);
arrayDeepClone(<array>);
                                                 entries(<iterator>[,offset=0]);
                                                                                       Array.prototype.toReversed();
                                                 size(<iterator>);
arrayMerge(<target>, <source1>[, sourceN]);
                                                                                       Array.prototype.toSorted();
                                                 every(<iterator>, <callback>);
arrayUnique(<iterator>);
                                                                                       Array.prototype.toSpliced();
                                                 some(<iterator>, <callback>);
                                                 none(<iterator>, <callback>);
arrayAdd(<array>,<value>);
                                                                                       Array.prototype.with();
arrayClear(<array>);
                                                 includes(<iterator>, <value>);
                                                                                       crypto.randomUUID();
                                                 contains(<iterator>,<value>);
arrayRemove(<array>, <value>[,all=false]);
                                                 find(<iterator>, <callback>);
arrayRemoveBy(<array>, <callback>[,all=false]);
                                                                                       Error.isError();
                                                 findLast(<iterator>,<callback>);
                                                 filter(<iterator>,<callback>);
arrayRange([start=0[,end=99[,step=1]]]);
                                                                                       globalThis;
                                                 reject(<iterator>, <callback>);
iterRange([start=0[,step=1[,end=Infinity]]]);
                                                 partition(<iterator>,<callback>);
                                                                                       Map.groupBy();
arrayCycle(<iterator>[,n=100]);
                                                 zip(<iterator1>[,iteratorN]);
iterCycle(<iter>[,n=Infinity]);
                                                                                       Math.sumPrecise();
                                                 unzip(<iterator>);
                                                 zipObj(<iterator1>,<iterator2>);
arrayRepeat(<value>[,n=100]);
                                                                                       Object.groupBy();
                                                 shuffle(<iterator>);
iterRepeat(<value>[,n=Infinity]);
                                                                                       Object.hasOwn();
                                                 min(<value1>[,valueN]);
                                                 max(<value1>[,valueN]);
slice(<iterator>[,begin=0[,end=Infinity]]);
                                                                                       TypedArray.prototype.toReversed();
                                                 sort(<iterator>[,numbers=false]);
withOut(<iterator>,<filterIterator >);
                                                 reverse (<iterator>);
reduce(<iterator>, <callback>[,initialvalue]);
                                                                                       TypedArray.prototype.toSorted();
count(<iterator>,<callback>);
                                                 item(<iterator>,<index>);
                                                                                       TypedArray.prototype.with();
                                                 nth(<iterator>,<index>);
take(<iterator>[,n=1]);
                                                 first(<iterator>);
takeWhile(<iterator>,<callback>);
                                                 head(<iterator>);
                                                                                               Non-standard polyfills
takeRight(<iterator>[,n=1]);
                                                 last(<iterator>);
takeRightWhile(<iterator>, <callback>);
                                                 initial(<iterator>);
                                                                                       BigInt.prototype.toJSON();
                                                 tail(<iterator>);
drop(<iterator>[,n=1]);
                                                                                       window.AsyncFunction();
dropWhile(<iterator>, <callback>);
                                                 flat(<iterator>);
dropRight(<iterator>[,n=1]);
                                                 concat(<iterator1>[,iteratorN]);
                                                                                       window.GeneratorFunction();
dropRightWhile(<iterator>, <callback>);
                                                 join(<iterator>[,separator=","]);
```

```
Math API
                                                                                      Abstract API
                                  toInt8(<value>);
                                                               createDataProperty(<object>,,,<value>);
                                  toInt16(<value>);
                                                               createDataPropertyOrThrow(<object>,,,<value>);
sum(<value1>[,valueN]);
avg(<value1>[,valueN]);
                                                               createMethodProperty(<object>,,,<value>);
                                  toInt32(<value>);
product(<value1>[,valueN]);
                                  toUInt8(<value>);
                                                               createMethodPropertyOrThrow(<object>,,<value>);
                                  toUInt16(<value>);
                                                               createPolyfillMethod(<object>,,,<value>);
clamp(<value>, <min>, <max>);
                                  toUInt32(<value>;
                                                               createPolyfillProperty(<object>,,,<value>);
minmax(<value>,<min>,<max>);
                                  toBigInt64(<value>);
                                                               deleteOwnProperty(<object>,,,property>[,Throw=false]);
                                  toBigUInt64(<value>);
                                                               deletePropertyOrThrow(<object>, , property>);
isEven(<value>);
                                  toFloat16(<value>);
                                                               getIn(<object>,,,;
                                  toFloat32(<value>);
isOdd(<value>);
                                                               getInV(<object>, , property>);
                                                               hasIn(<object>,,);
                                  isInt8(<value>);
randomInt([max]);
                                  isInt16(<value>);
                                                               isIndex(<value>);
randomInt(<min>, <max>);
                                  isInt32(<value>);
                                                               isLength(<value>);
                                  isUInt8(<value>);
randomFloat([max]);
                                                               isLessThan(<value1>,<value2>[,leftFirst = true]);
                                  isUInt16(<value>);
randomFloat(<min>,<max>);
                                                               isPropertyKey(<value>);
                                  isUInt32(<value>);
                                                               isSameType(<value1>, <value2>);
                                  isBigInt64(<value>);
                                                               isSameValue(<value1>, <value2>);
inRange(<value>, <min>, <max>);
                                  isBigUInt64(<value>);
signbit(<value>);
                                                               isSameValueNonNumber(<value1>, <value2>);
                                  isFloat16(<value>);
                                                               isSameValueZero(<value1>, <value2>);
                          Cookie API
                                                               requireObjectCoercible(<object>);
getCookie([name]); and hasCookie(<name>);
                                                               setIn(<object>,,<value>[,Throw=false]);
setCookie(<Options object>);
                                                               toArray(value);
setCookie(<name>, <value>[, hours=8760
                                                               toIndex(<value>);
  [,path="/"[,domain[,secure[,SameSite="Lax"[,HttpOnly]]]]]]);
                                                               toInteger(<value>);
removeCookie(<Options object>);
                                                               toIntegerOrInfinity(<value>);
removeCookie(<name>
                                                               toLength(<value>);
  [,path="/"[,domain[,secure[,SameSite="Lax"[,HttpOnly]]]]]);
                                                               toObject(<value>);
clearCookies(<Options object>);
                                                               toPrimitiveValue(<value>);
clearCookies([path="/"[,domain[,sec[,SameSite="Lax"
                                                               toPropertyKey(<value>);
  [,HttpOnly]]]]);
                                                               type(<value>);
                                                    AJAX and CORS API
getText(<url>, <success>); and getJson(<url>, <success>);
ajax(<Options object>);
Options object properties (* = default value): url: string, data: string, queryType: *"ajax"/"cors", type: *"get"/"post",
success: function, error: function, format: *"text"/"json"/"xml", user: string, password: string
```

| Removed Polyfills - Available in celestra-polyfills.dev.js and celestra-polyfills.min.js |   |  |
|--|---|--|
| V3.1.0   | v3.8.0  | v5.6.0   |
| Array.from();  |   | Array.prototype.at();                            |
| Array.of();  | <pre>Array.prototype.values();</pre>              |  |
| <pre>Array.prototype.copyWithin();</pre>   |   | <pre>Array.prototype.findLast();</pre>           |
| Array.prototype.fill();  | <pre>Array.prototype.includes();</pre>            | <pre>Array.prototype.findLastIndex();</pre>      |
| Array.prototype.find();  |   |  |
| Array.prototype.findIndex();   | <pre>ChildNode.after();</pre>                     | <pre>Array.prototype.flat();</pre>               |
| Object.create();   | <pre>ChildNode.before();</pre>                    | Array.prototype.flatMap();                       |
| String.fromCodePoint();  | <pre>ChildNode.remove();</pre>                    |  |
| String.prototype.codePointAt();  | <pre>ChildNode.replaceWith();</pre>               | Number.MIN SAFE INTEGER;                         |
| String.prototype.endsWith();   | - "   | Number.MAX SAFE INTEGER;                         |
| String.prototype.startsWith();   | <pre>Element.prototype.closest();</pre>           |  |
| Math.acosh();  | <pre>Element.prototype.getAttributeNames();</pre> | Object.fromEntries();                            |
| <pre>Math.asinh();</pre>   | <pre>Element.prototype.matches();</pre>           |  |
| Math.atanh();  | <pre>Element.prototype.toggleAttribute();</pre>   | Object.is();                                     |
| Math.cbrt();   |   |  |
| Math.clz32();  | <pre>ParentNode.append();</pre>                   | <pre>String.prototype.at();</pre>                |
| Math.cosh();   |   |  |
| Math.expm1();  | <pre>ParentNode.prepend();</pre>                  | String.prototype.matchAll();                     |
| Math.fround();   |   |  |
| Math.hypot();  | <pre>String.prototype[Symbol.iterator]();</pre>   | <pre>String.prototype.padStart();</pre>          |
| Math.imul();   | String.prototype.includes();                      | String.prototype.padEnd();                       |
| Math.log1p();  | String.prototype.repeat();                        |  |
| Math.log10();  |   | String.prototype.replaceAll();                   |
| Math.log2();   | <pre>NodeList.prototype.forEach();</pre>          |  |
| Math.sign();   | 1 11 11   | <pre>String.prototype.trimStart();</pre>         |
| Math.sinh();   | Object.assign();                                  | String.prototype.trimLeft();                     |
| Math.tanh();   | Object.entries();                                 |  |
| Math.trunc();  |   | <pre>String.prototype.trimEnd();</pre>           |
| Number.EPSILON;  | <pre>Object.getOwnPropertyDescriptors();</pre>    | <pre>String.prototype.trimRight();</pre>         |
| <pre>Number.isNaN(); and isNaN();</pre>  | Object.values();                                  |  |
| Number.isInteger();  |   | Typedarray.prototype.at();                       |
| Number.isFinite();   | <pre>RegExp.prototype.flags;</pre>                | 4 1 41 1/  |
| Number.isSafeInteger();  |   | <pre>TypedArray.prototype.findLast();</pre>      |
| Number.parseInt();   | window.screenLeft;                                | <pre>TypedArray.prototype.findLastIndex();</pre> |
| Number.parseFloat();   | window.screenTop;                                 |  |